

**Zinc Finger Site Type:** Nuclease  
**Zinc Finger Engineering Method:** CoDA  
**Sequence Name :** HSV-2 Genomic  
**Sequence Length:**154748  
**Nucleotide Sequence**

**Sort By:** Position ☐ **Hide intron splice sites**

**ZFN-unknown-SP-7-1**

1 aGTCCCCGTCCTGCCGC**GCGGGGCGC**g 27  
1 t**CAGGGGCAG**GACGGCGCGCCCCCGCc 27

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | EEANLRR | <b>GAC</b> | —                | CoDA   |
| Left F2  | RREHLVR | <b>GGG</b> | —                | CoDA   |
| Left F3  | DPSNLQR | <b>GAC</b> | —                | CoDA   |
| Right F1 | KRHTLTR | <b>GCG</b> | —                | CoDA   |
| Right F2 | RREHLVR | <b>GGG</b> | —                | CoDA   |
| Right F3 | RTDSLPR | <b>GCG</b> | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GTCCCCGTCNNNNNNGCGGGGGCG

**ZFN-unknown-SP-6-1**

8 gTCCTGCCGCGCGGGG**GCGGGCGCG**g 33  
8 c**AGGACGGCG**CGCCCCGCCCCGCGCc 33

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RTDRLIR | <b>GGA</b> | —                | CoDA   |
| Left F2  | QSTTLKR | <b>GCA</b> | —                | CoDA   |
| Left F3  | RLDMLAR | <b>GCG</b> | —                | CoDA   |
| Right F1 | RRHGLDR | <b>GCG</b> | —                | CoDA   |
| Right F2 | LKEHLTR | <b>GGC</b> | —                | CoDA   |
| Right F3 | RKDGLTR | <b>GCG</b> | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TCCTGCCGCGNNNNNNGCGGGGCGCG

**ZFN-unknown-SP-7-2**

64 aGGCAGCCCCGCGGCGC**GCGGGGGA**g 90  
64 t**CCGTCTGGG**CGCCGCGCGCCCCCCTc 90

| FINGER | HELIX | TRIPLET | REFERENCE NUMBER | SOURCE |
|--------|-------|---------|------------------|--------|
|--------|-------|---------|------------------|--------|

|          |         |            |   |      |
|----------|---------|------------|---|------|
| Left F1  | DRRTLDR | <u>GCC</u> | – | CoDA |
| Left F2  | QRSDLTR | <u>GCT</u> | – | CoDA |
| Left F3  | RTEHLAR | <u>GGG</u> | – | CoDA |
| Right F1 | TSAHLAR | <u>GGA</u> | – | CoDA |
| Right F2 | RREHLVR | <u>GGG</u> | – | CoDA |
| Right F3 | RTDSLPR | <u>GCG</u> | – | CoDA |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GGCA GCCC NNNNNN NGCGGGGGGA

#### ⊕ ZFN-unknown-SP-5-1

69 gCCCCGCGGCGCGCGGGGGAGGGg 93  
69 cGGGGCGCGCGCGCCCCCTCCCCc 93

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RGNHLRR | <u>GGG</u> | –                | CoDA   |
| Left F2  | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Left F3  | ERRGLAR | <u>GCC</u> | –                | CoDA   |
| Right F1 | KKDHLHR | <u>GGG</u> | –                | CoDA   |
| Right F2 | QSAHLKR | <u>GGA</u> | –                | CoDA   |
| Right F3 | RTEHLAR | <u>GGG</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCC GCGC NNNNNN GGGGAGGG

#### ⊕ ZFN-unknown-SP-6-2

69 gCCCCGCGGCGCGGGGGAGGGc 94  
69 cGGGGCGCGCGCGCCCCCTCCCCg 94

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RGNHLRR | <u>GGG</u> | –                | CoDA   |
| Left F2  | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Left F3  | ERRGLAR | <u>GCC</u> | –                | CoDA   |
| Right F1 | RNTHLAR | <u>GGG</u> | –                | CoDA   |
| Right F2 | RQDNLGR | <u>GAG</u> | –                | CoDA   |
| Right F3 | RIDKLGG | <u>GGG</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCC GCGC NNNNNN GGGGAGGG

#### ⊕ ZFN-unknown-SP-6-3

91 gGGCGGCGCCCGCGGGGAGCGGCCg 116  
91 cCCGCCGCGCGCGCCCCCTCGCCGg 116

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DGSTLR  | GCC     | –                | CoDA   |
| Left F2  | DSSVLR  | GCC     | –                | CoDA   |
| Left F3  | ENSKLNR | GCG     | –                | CoDA   |
| Right F1 | DPSTLR  | GCC     | –                | CoDA   |
| Right F2 | RTDTLR  | GCG     | –                | CoDA   |
| Right F3 | QTTHLSR | GGA     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GGCGGCGCCNNNNNNGGAGCGGCC

#### + ZFN-unknown-SP-6-4

94 cGGCGCCCGCGGGGGA~~GCGGCCGGC~~t 119

94 g~~CCGCGGGCG~~CCCCCTCGCCGGCCGa 119

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SNKDLTR | GCC     | –                | CoDA   |
| Left F2  | LKEHLTR | GCG     | –                | CoDA   |
| Left F3  | RKDGLTR | GCG     | –                | CoDA   |
| Right F1 | TPSKLDR | GCG     | –                | CoDA   |
| Right F2 | DSSVLR  | GCC     | –                | CoDA   |
| Right F3 | RVDDLGR | GCG     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GGCGCCCGCNNNNNNGCGGCCGCGC

#### + ZFN-unknown-SP-6-5

155 gCCCTGCCGCCCCGCC~~GCGGCCGCC~~g 180

155 c~~GGGACGGCG~~GGCGGGCGGCGGCGGc 180

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RRAHLQN | GGG     | –                | CoDA   |
| Left F2  | QSTTLKR | GCA     | –                | CoDA   |
| Left F3  | RLDMLAR | GCG     | –                | CoDA   |
| Right F1 | DGSTLR  | GCC     | –                | CoDA   |
| Right F2 | DSSVLR  | GCC     | –                | CoDA   |
| Right F3 | ERRGLAR | GCC     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast CCCTGCCGNNNNNNGCCGCGGCC

#### + ZFN-unknown-SP-5-2

159 tGCCGCCCCGCCGCCGCCGCCc 183  
 159 aCGGCGGGCGGGCGGCGGCGGCGGg 183

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SKHKLER | GGC     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | RKDGLTR | GCG     | –                | CoDA   |
| Right F1 | DGSTLRR | GCC     | –                | CoDA   |
| Right F2 | DSSVLRR | GCC     | –                | CoDA   |
| Right F3 | ERRGLAR | GCC     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast GCCGCCCCGNNNNNGCCGCCGCC

⊞ ZFN-unknown-SP-7-3  
 262 gTCCTGCCGCCGCCCTTAAGAGGGC 288  
 262 cAGGACGGCGCGGGGAATTCTCCCG 288

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RTDRLIR | GGA     | –                | CoDA   |
| Left F2  | QSTTLKR | GCA     | –                | CoDA   |
| Left F3  | RLDMLAR | GCG     | –                | CoDA   |
| Right F1 | SPSKLVR | GGC     | –                | CoDA   |
| Right F2 | RQDNLGR | GAG     | –                | CoDA   |
| Right F3 | QGGNLTL | TAA     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast TCCTGCCGCNNNNNNNTAAGAGGGC

⊞ ZFN-unknown-SP-7-4  
 623 tCGCTCCTGCGGCGCTGGCTGCTGGTg 649  
 623 aGCGAGGACGCCGACCGACGACCAc 649

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KNNDLTR | GCG     | –                | CoDA   |
| Left F2  | QSAHLKR | GGA     | –                | CoDA   |
| Left F3  | QDVSLVR | GCA     | –                | CoDA   |
| Right F1 | RRQKLTI | GGT     | –                | CoDA   |
| Right F2 | QRSDLTR | GCT     | –                | CoDA   |
| Right F3 | LRASLRR | GCT     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast CGCTCCTGCNNNNNNNGCTGCTGGT

⊕ ZFN-unknown-SP-7-5

626 cTCCTGCGGCGCTGGCTGCTGGTGCCc 652

626 gAGGACGCCGCGACCGACGACCACGGg 652

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RTDRLIR | GGA     | –                | CoDA   |
| Left F2  | QSTTLKR | GCA     | –                | CoDA   |
| Left F3  | DPSNLRR | GCC     | –                | CoDA   |
| Right F1 | SKKSLTR | GCC     | –                | CoDA   |
| Right F2 | EAHHLR  | GGT     | –                | CoDA   |
| Right F3 | EGSGLKR | GCT     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TCCTGCGGCNNNNNNGCTGGTGCC

⊕ ZFN-unknown-SP-6-6

676 gGACTACGCCGCAACGACGACGCAg 701

676 cCTGATGCCGCCGTTGCTGCTGCGTc 701

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | TSTILAR | GTC     | –                | CoDA   |
| Left F2  | QRSSLVR | GTA     | –                | CoDA   |
| Left F3  | ESGHLKR | GGC     | –                | CoDA   |
| Right F1 | LKHSLLR | GCA     | –                | CoDA   |
| Right F2 | DRGNLTR | GAC     | –                | CoDA   |
| Right F3 | DQGNLIR | GAC     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GACTACGCCNNNNNNGACGACGCA

⊕ ZFN-unknown-SP-6-7

679 cTACGCCGCAACGACGACGAGAGt 704

679 gATGCGGCCGTTGCTGCTGCGTCTCa 704

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | QSSLLR  | GTA     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | DPSNLRR | GCC     | –                | CoDA   |
| Right F1 | KHSNLAR | GAG     | –                | CoDA   |
| Right F2 | QSTTLKR | GCA     | –                | CoDA   |
| Right F3 | DPSNLRR | GAC     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TACGCCGGCNNNNNGACGCAGAG

⊕ ZFN-unknown-SP-6-8

709 gAACAGCCCCCGAGCGAGGGCGGGg 734

709 cTGTCGGGGGGCTCGCTCCCCCCCCc 734

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | QATLLRR | <u>GTT</u> | —                | CoDA   |
| Left F2  | QRSDLTR | <u>GCT</u> | —                | CoDA   |
| Left F3  | RTEHLAR | <u>GGG</u> | —                | CoDA   |
| Right F1 | RKHHLGR | <u>GGG</u> | —                | CoDA   |
| Right F2 | LKEHLTR | <u>GGC</u> | —                | CoDA   |
| Right F3 | RVDNLPR | <u>GAG</u> | —                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast AACAGCCCCNNNNNGAGGGCGGG

⊕ ZFN-unknown-SP-6-9

713 aGCCCCCGAGCGAGGGCGGGGGGAa 738

713 tCGGGGGGCTCGCTCCCCCCCCCt 738

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | TNSKLTR | <u>GGC</u> | —                | CoDA   |
| Left F2  | RREHLVR | <u>GGG</u> | —                | CoDA   |
| Left F3  | RMDSLGG | <u>TCG</u> | —                | CoDA   |
| Right F1 | TSAHLAR | <u>GGA</u> | —                | CoDA   |
| Right F2 | RREHLVR | <u>GGG</u> | —                | CoDA   |
| Right F3 | RTDSLPR | <u>GCG</u> | —                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GCCCCCGANNNNNNGCGGGGGGA

⊕ ZFN-unknown-SP-5-3

713 aGCCCCCGAGCGAGGCGGGGGGAa 737

713 tCGGGGGGCTCGCTCCCCCCCCCt 737

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | TNSKLTR | <u>GGC</u> | —                | CoDA   |
| Left F2  | RREHLVR | <u>GGG</u> | —                | CoDA   |
| Left F3  | RMDSLGG | <u>TCG</u> | —                | CoDA   |
| Right F1 | RKHHLGR | <u>GGG</u> | —                | CoDA   |
| Right F2 | RREHLVR | <u>GGG</u> | —                | CoDA   |
| Right F3 | ESGHLKR | <u>GGC</u> | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCGGGGGGANNNNNGCGGGGGG

⊞ ZFN-unknown-SP-7-6

753 cGCACGCCGCGCCTGCCGCCGCGTGCc 779

753 gCGTGGGGCGGACGGCGGCGGACGg 779

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RSRNLTL | TGC     | –                | CoDA   |
| Left F2  | RTDTLAR | GCG     | –                | CoDA   |
| Left F3  | RVDDLGR | GCG     | –                | CoDA   |
| Right F1 | RGRNLEM | TGC     | –                | CoDA   |
| Right F2 | DSSVLRR | GCC     | –                | CoDA   |
| Right F3 | ERRGLAR | GCC     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCACGCCGCGNNNNNGCCGCCTGC

⊞ ZFN-unknown-SP-5-4

769 cGCCGCTGCCCCCGCCGCCGCGCCg 793

769 gCGGCGGACGGGGGCGGCGGCGGc 793

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SKHKLER | GGC     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | QTNTLKR | GCA     | –                | CoDA   |
| Right F1 | DGSTLRR | GCC     | –                | CoDA   |
| Right F2 | DSSVLRR | GCC     | –                | CoDA   |
| Right F3 | ERRGLAR | GCC     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCCGCCTGCNNNNNGCCGCCGCC

⊞ ZFN-unknown-SP-5-5

772 cGCCTGCCCCCGCCGCCGCCGCGc 796

772 gCGGACGGGGGCGGCGGCGGCGCg 796

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | VPSKLLR | GGC     | –                | CoDA   |
| Left F2  | QSTTLKR | GCA     | –                | CoDA   |
| Left F3  | RTEHLAR | GGG     | –                | CoDA   |
| Right F1 | RLRDLPR | GCG     | –                | CoDA   |

|          |         |            |   |      |
|----------|---------|------------|---|------|
| Right F2 | DSSVLRR | <u>GCC</u> | – | CoDA |
| Right F3 | ERRGLAR | <u>GCC</u> | – | CoDA |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCCTGCCCCNNNNNGCCGCCGCG

#### ⊕ ZFN-unknown-SP-7-7

839 cTACGGCTGCGCACCACGACGGAGTAc 865

839 gATGCCGACGCGTGGTGCTGCCTCATg 865

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | QKQALTR | <u>GTA</u> | –                | CoDA   |
| Left F2  | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Left F3  | QGGTLRR | <u>GCA</u> | –                | CoDA   |
| Right F1 | QQQALTR | <u>GTA</u> | –                | CoDA   |
| Right F2 | QSAHLKR | <u>GGA</u> | –                | CoDA   |
| Right F3 | DPSNLRR | <u>GAC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TACGGCTGCNNNNNNNGACGGAGTA

#### ⊕ ZFN-unknown-SP-7-8

897 cCCCCGCGTCCCCGCCCGCGGACGCGc 923

897 gGGGCGCAGGGGCGGGCGCCTGCGCg 923

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RGNHLRR | <u>GGG</u> | –                | CoDA   |
| Left F2  | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Left F3  | DPSNLRR | <u>GAC</u> | –                | CoDA   |
| Right F1 | KHDTLHR | <u>GCG</u> | –                | CoDA   |
| Right F2 | DRGNLTR | <u>GAC</u> | –                | CoDA   |
| Right F3 | RRDGLTR | <u>GCG</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCCCGCTCNNNNNNNGCGGACGCG

#### ⊕ ZFN-unknown-SP-6-10

1069 cCGTGTCTCCCCGCCCGACGGTGTGc 1094

1069 gGCACAGAGGGGCGGGCGTCCACACg 1094

| FINGER  | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|---------|---------|------------|------------------|--------|
| Left F1 | KGNDLTR | <u>ACG</u> | –                | CoDA   |
| Left F2 | DRGNLTR | <u>GAC</u> | –                | CoDA   |

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F3  | QGGHLKR | GGA | – | CoDA |
| Right F1 | RRFILSR | GTG | – | CoDA |
| Right F2 | EAHHLSR | GGT | – | CoDA |
| Right F3 | QNGTLTR | GCA | – | CoDA |

[ZF DNA Sequence](#)

**Blast**

⊕ ZFN-unknown-SP-7-9  
 1184 cGACCGCGACCGGTTCCGCGCGCGt 1210  
 1184 gCTGGCGCTGGCCAAGGCCGCGGCGCa 1210

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | TSTLLNR | GTC     | –                | CoDA   |
| Left F2  | RTDTLAR | GCG     | –                | CoDA   |
| Left F3  | ESGALRR | GTC     | –                | CoDA   |
| Right F1 | RLRDLPR | GCG     | –                | CoDA   |
| Right F2 | DSSVLRR | GCC     | –                | CoDA   |
| Right F3 | ENSKLNR | GGC     | –                | CoDA   |

[ZF DNA Sequence](#)

**Blast**

⊕ ZFN-unknown-SP-5-6  
 1197 tTCCGGCGCCCGGTGGCGGCGCCg 1221  
 1197 aAGGCGCGGCGCACCGCCGCGGc 1221

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DNAHLAR | GGA     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | ENSKLNR | GGC     | –                | CoDA   |
| Right F1 | DPSTLRR | GCC     | –                | CoDA   |
| Right F2 | RTDTLAR | GCG     | –                | CoDA   |
| Right F3 | RVDDLGR | GCG     | –                | CoDA   |

[ZF DNA Sequence](#)

**Blast**

⊕ ZFN-unknown-SP-7-10  
 1300 gACCCGCGGAGGAGGAGGAGGCGGCGg 1326  
 1300 cTGGGCGCCTCCTCCTCCTCCGCCGCc 1326

| FINGER | HELIX | TRIPLET | REFERENCE NUMBER | SOURCE |
|--------|-------|---------|------------------|--------|
|--------|-------|---------|------------------|--------|

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F1  | TKQKLQT | GGT | – | CoDA |
| Left F2  | RTDTLAR | GCG | – | CoDA |
| Left F3  | DKRSLPH | TCC | – | CoDA |
| Right F1 | RSNTLLR | GCG | – | CoDA |
| Right F2 | RTDTLAR | GCG | – | CoDA |
| Right F3 | RRDNLLR | GAG | – | CoDA |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast ACCCGCGGANNNNNNGAGGCGGCG

⊞ ZFN-unknown-SP-6-11

1300 gACCCGCGGAGGAGGA**GGA****GGCGGC**g 1325  
1300 c**TGGGCGCCT**CCTCCTCCTCCGCCGc 1325

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | TKQKLQT | GGT     | –                | CoDA   |
| Left F2  | RTDTLAR | GCG     | –                | CoDA   |
| Left F3  | DKRSLPH | TCC     | –                | CoDA   |
| Right F1 | SKHKLER | GCG     | –                | CoDA   |
| Right F2 | LKEHLTR | GCG     | –                | CoDA   |
| Right F3 | QSQHLVR | GGA     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast ACCCGCGGANNNNNNGGAGGCGGC

⊞ ZFN-unknown-SP-7-11

1506 cCGCTCCGCCCGCCCCA**GGG****GGCGGC**g 1532  
1506 g**GCGAGGCGG**GCGGGGTCCCCCGCCGc 1532

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KNNDLTR | GCG     | –                | CoDA   |
| Left F2  | QSAHLKR | GGA     | –                | CoDA   |
| Left F3  | EKSHLKR | GCG     | –                | CoDA   |
| Right F1 | SKHKLER | GCG     | –                | CoDA   |
| Right F2 | LKEHLTR | GCG     | –                | CoDA   |
| Right F3 | RGDKLAL | GGG     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCTCCGCCNNNNNNGGGGGCGGC

⊞ ZFN-unknown-SP-5-7

1509 cTCCGCGCGCCCCAG**GGG****GCGGCG**c 1533  
1509 g**AGGCGGGCG**GGGTCCCCCGCCGc 1533

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RPSKLVL | <u>GGA</u> | –                | CoDA   |
| Left F2  | LKEHLTR | <u>GGC</u> | –                | CoDA   |
| Left F3  | RKDGLTR | <u>GCG</u> | –                | CoDA   |
| Right F1 | RSNTLLR | <u>GCG</u> | –                | CoDA   |
| Right F2 | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Right F3 | RKHRLDG | <u>GGG</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TCCGCCCGCNNNNNGGGGCGGCG

+ ZFN-unknown-SP-7-12

1512 cGCCCCCCCCAGGGGGCGGCGCCGGCc 1538

1512 gGGGCGGGGTCCCCCGCCGCGGCCGg 1538

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | VPSKLAR | <u>GGC</u> | –                | CoDA   |
| Left F2  | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Left F3  | RKHRLDG | <u>GGG</u> | –                | CoDA   |
| Right F1 | TPSKLDR | <u>GCG</u> | –                | CoDA   |
| Right F2 | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Right F3 | ENSKLNR | <u>GGC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCCCGCCCCNNNNNNNGGCGCCGGC

+ ZFN-unknown-SP-6-12

1513 gCCCCCCCCAGGGGGCGGCGCCGGCc 1538

1513 cGGGCGGGTCCCCCGCCGCGGCCGg 1538

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RKHHLGR | <u>GGG</u> | –                | CoDA   |
| Left F2  | LKEHLTR | <u>GGC</u> | –                | CoDA   |
| Left F3  | RTESLHI | <u>TGG</u> | –                | CoDA   |
| Right F1 | TPSKLDR | <u>GCG</u> | –                | CoDA   |
| Right F2 | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Right F3 | ENSKLNR | <u>GGC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCGCCCCANNNNNNGGCGCCGGC

+

ZFN-unknown-SP-5-8

1931 gGGCCGCGCCGGCGG**GGCGCCGGG**g 1955  
 1931 c**CCGCGCGCG**CCGCCCCGCGCCCCc 1955

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | DPSTLRR | <b>GCC</b> | –                | CoDA   |
| Left F2  | RTDTLAR | <b>GCG</b> | –                | CoDA   |
| Left F3  | ESGHLKR | <b>GGC</b> | –                | CoDA   |
| Right F1 | KGDHLRR | <b>GGG</b> | –                | CoDA   |
| Right F2 | DSSVLRR | <b>GCC</b> | –                | CoDA   |
| Right F3 | ENSKLNR | <b>GGC</b> | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

**Blast** GGCCGCGCCNNNNNGGCGCCGGG

⊞ ZFN-unknown-SP-5-9  
 1934 cCGCGCCGGCGGGGC**GCCGGGGGG**a 1958  
 1934 g**GCGCGCGCG**CCCCGCGGCCCCCct 1958

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RRHGLDR | <b>GCG</b> | –                | CoDA   |
| Left F2  | LKEHLTR | <b>GCG</b> | –                | CoDA   |
| Left F3  | DPSNLRR | <b>GCC</b> | –                | CoDA   |
| Right F1 | RKHHLGR | <b>GGG</b> | –                | CoDA   |
| Right F2 | RREHLVR | <b>GGG</b> | –                | CoDA   |
| Right F3 | EHRGLKR | <b>GCC</b> | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

**Blast** CGCGCCGGCNNNNNGCCGGGGGG

⊞ ZFN-unknown-SP-7-13  
 1960 tCCCATCTGCGTCGGCG**GGGGGCGGC**g 1986  
 1960 a**GGGTAGACG**CAGCCGCCCCCGCCGc 1986

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | KKDHLHR | <b>GGG</b> | –                | CoDA   |
| Left F2  | VRHNLTR | <b>GAT</b> | –                | CoDA   |
| Left F3  | QGNTLTR | <b>GCA</b> | –                | CoDA   |
| Right F1 | SKHKLER | <b>GGC</b> | –                | CoDA   |
| Right F2 | LKEHLTR | <b>GCG</b> | –                | CoDA   |
| Right F3 | RGDKLAL | <b>GGG</b> | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

**Blast** CCCATCTGCNNNNNNNGGGGGCGGC

⊕ ZFN-unknown-SP-5-10

1963 cATCTGCGTCGGCGG**GGG****GCG****GCG**c 1987  
 1963 g**TAG****ACG****CAG**CCGCCCCCGCCGc 1987

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | SKQALAV | <b>GAT</b> | –                | CoDA   |
| Left F2  | QSTTLKR | <b>GCA</b> | –                | CoDA   |
| Left F3  | DPSNLRR | <b>GAC</b> | –                | CoDA   |
| Right F1 | RSNTLLR | <b>GCG</b> | –                | CoDA   |
| Right F2 | RTDTLAR | <b>GCG</b> | –                | CoDA   |
| Right F3 | RKHRLDG | <b>GGG</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast ATCTGCGTCNNNNNGGGGCGGCG

⊕ ZFN-unknown-SP-7-14

1966 cTGCCTCGGCGGGGGGC**GGC****GCA****TGC**t 1992  
 1966 g**ACG****CAG****CCG**CCCCCGCCGCTACGa 1992

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | LKHSLLR | <b>GCA</b> | –                | CoDA   |
| Left F2  | DRGNLTR | <b>GAC</b> | –                | CoDA   |
| Left F3  | DKSVLAR | <b>GCC</b> | –                | CoDA   |
| Right F1 | RNRNLVL | <b>TGC</b> | –                | CoDA   |
| Right F2 | QSTTLKR | <b>GCA</b> | –                | CoDA   |
| Right F3 | DGGHLTR | <b>GGC</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast TGCCTCGGCNNNNNNGGCGCATGC

⊕ ZFN-unknown-SP-6-13

2034 gGGCCGCCCCGAGAGG**GGG****GGA****TTC**c 2059  
 2034 c**CCG****GCG****GGG**CTCTCCCCCCTAAGg 2059

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | DPSTLRR | <b>GCC</b> | –                | CoDA   |
| Left F2  | RTDTLAR | <b>GCG</b> | –                | CoDA   |
| Left F3  | RKHRLDG | <b>GGG</b> | –                | CoDA   |
| Right F1 | RANHLTI | <b>TTC</b> | –                | CoDA   |
| Right F2 | QSAHLKR | <b>GGA</b> | –                | CoDA   |
| Right F3 | RTEHLAR | <b>GGG</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GGCCGCCCCNNNNNNGGGGGA TTC

+ ZFN-unknown-SP-7-15

2057 tCCCTCCCTCCGCCCCC**GCCGGG**GCGc 2083

2057 a**GGGAGG**GAGCGGGGGCGGCCCGCg 2083

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | KKDHLHR | <b>GGG</b> | —                | CoDA   |
| Left F2  | QSAHLKR | <b>GGA</b> | —                | CoDA   |
| Left F3  | VHWNLMR | <b>GAG</b> | —                | CoDA   |
| Right F1 | KRHTLTR | <b>GCG</b> | —                | CoDA   |
| Right F2 | RREHLVR | <b>GGG</b> | —                | CoDA   |
| Right F3 | EHRGLKR | <b>GCC</b> | —                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast CCCTCCCTCNNNNNNGCCGGGGCG

+ ZFN-unknown-SP-6-14

2200 gAGCGGCGGCCCGGCG**GGA****GGA**GGAg 2225

2200 c**TCGCCGCC**GGCCGCCCTCCTCCTc 2225

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | LRTSLVR | <b>GCT</b> | —                | CoDA   |
| Left F2  | DSSVLRR | <b>GCC</b> | —                | CoDA   |
| Left F3  | ERRGLAR | <b>GCC</b> | —                | CoDA   |
| Right F1 | RTDRLIR | <b>GGA</b> | —                | CoDA   |
| Right F2 | QSAHLKR | <b>GGA</b> | —                | CoDA   |
| Right F3 | QMSHLKR | <b>GGA</b> | —                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast AGCGGCGGCNNNNNNGGAGGAGGA

+ ZFN-unknown-SP-7-16

2200 gAGCGGCGGCCCGGCG**GAG****GAG**GAGa 2226

2200 c**TCGCCGCC**GGCCGCCCTCCTCCTc 2226

| FINGER   | HELIX     | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|-----------|------------|------------------|--------|
| Left F1  | LRTSLVR   | <b>GCT</b> | —                | CoDA   |
| Left F2  | DSSVLRR   | <b>GCC</b> | —                | CoDA   |
| Left F3  | ERRGLAR   | <b>GCC</b> | —                | CoDA   |
| Right F1 | RQMNLDLDR | <b>GAG</b> | —                | CoDA   |
| Right F2 | RQDNLGR   | <b>GAG</b> | —                | CoDA   |
| Right F3 | RVDNLPR   | <b>GAG</b> | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast AGCGGCGGCNNNNNNGAGGAGGAG

⊞ ZFN-unknown-SP-5-11

2335 gGACCCCGGCCCCGAGCGGCCGCCg 2359

2335 cCTGGGGCCGGGGCTCGCCGGCGGc 2359

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | TKSLLAR | <u>GTC</u> | –                | CoDA   |
| Left F2  | RREHLVR | <u>GGG</u> | –                | CoDA   |
| Left F3  | EHRGLKR | <u>GCC</u> | –                | CoDA   |
| Right F1 | DGSTLRR | <u>GCC</u> | –                | CoDA   |
| Right F2 | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Right F3 | RVDDLGR | <u>GCG</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GACCCCGGCNNNNNGCGGCCGCC

⊞ ZFN-unknown-SP-5-12

2338 cCCCGGCCCCGAGCGGCCGCCGCGg 2362

2338 gGGGCCGGGCTCGCCGGCGGCGC 2362

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | KGDHLRR | <u>GGG</u> | –                | CoDA   |
| Left F2  | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Left F3  | RTEHLAR | <u>GGG</u> | –                | CoDA   |
| Right F1 | RLRDLPR | <u>GCG</u> | –                | CoDA   |
| Right F2 | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Right F3 | ERRGLAR | <u>GCC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCGGCCCCNNNNNGCCGCCGCG

⊞ ZFN-unknown-SP-7-17

2365 gACCCCGGCACGGTGAGAGGGCGACc 2391

2365 cTGGGGCCGTGCCACTCTCCCCTGg 2391

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RQSRLQR | <u>GGT</u> | –                | CoDA   |
| Left F2  | RREHLVR | <u>GGG</u> | –                | CoDA   |
| Left F3  | EHRGLKR | <u>GCC</u> | –                | CoDA   |
| Right F1 | DPSNLRR | <u>GAC</u> | –                | CoDA   |

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Right F2 | LKEHLTR | GGC | – | CoDA |
| Right F3 | RVDNLPR | GAG | – | CoDA |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast ACCCCCGGCNNNNNNNGAGGGCGAC

#### + ZFN-unknown-SP-6-15

2425 aCCCGGCTGCGGGTTG**GGG****GTG****GTC**g 2450

2425 t**GGG****CCG****ACG**CCCAACCCCCACCAGc 2450

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KGDHLRR | GGG     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | QGGTLRR | GCA     | –                | CoDA   |
| Right F1 | TMAVLRR | GTC     | –                | CoDA   |
| Right F2 | RREVLEN | GTG     | –                | CoDA   |
| Right F3 | RQHLKR  | GGG     | –                | CoDA   |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast CCCGGCTGCNNNNNNGGGGTGGTC

#### + ZFN-unknown-SP-5-13

2425 aCCCGGCTGCGGGTT**GGG****GGT****GGT**c 2449

2425 t**GGG****CCG****ACG**CCCAACCCCCACCAg 2449

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KGDHLRR | GGG     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | QGGTLRR | GCA     | –                | CoDA   |
| Right F1 | MKHHLAR | GGT     | –                | CoDA   |
| Right F2 | EAHHLAR | GGT     | –                | CoDA   |
| Right F3 | RTEHLAR | GGG     | –                | CoDA   |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast CCCGGCTGCNNNNNNGGGGTGGT

#### + ZFN-unknown-SP-6-16

2538 cGCCCCCGACCTCT**GGG****GGG****GCG**a 2563

2538 g**CGG****GGG****GCT**GGGAGACCCCCCGct 2563

| FINGER  | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|---------|---------|---------|------------------|--------|
| Left F1 | TNSKLTR | GGC     | –                | CoDA   |
| Left F2 | RREHLVR | GGG     | –                | CoDA   |

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F3  | RMDSLGG | TCG | – | CoDA |
| Right F1 | KRHTLTR | GCG | – | CoDA |
| Right F2 | RREHLVR | GGG | – | CoDA |
| Right F3 | RNDKLVP | GGG | – | CoDA |

[ZF DNA Sequence](#)

**Blast** GCCCCCGANNNNNNGGGGGGGCG

+ ZFN-unknown-SP-5-14  
 2538 cGCCCCCGACCCTCTGGGGGGGCG 2562  
 2538 gGGGGGGGCTGGGAGACCCCCCGc 2562

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | TNSKLTR | GGG     | –                | CoDA   |
| Left F2  | RREHLVR | GGG     | –                | CoDA   |
| Left F3  | RMDSLGG | TCG     | –                | CoDA   |
| Right F1 | TNSKLTR | GCG     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RMDHLAG | TGG     | –                | CoDA   |

[ZF DNA Sequence](#)

**Blast** GCCCCCGANNNNNTGGGGGGGC

+ ZFN-unknown-SP-5-15  
 2539 gCCCCCGACCCTCTGGGGGGGCGa 2563  
 2539 cGGGGGGGCTGGGAGACCCCCCGct 2563

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RKHHLGR | GGG     | –                | CoDA   |
| Left F2  | RREHLVR | GGG     | –                | CoDA   |
| Left F3  | DPTSLNR | GTC     | –                | CoDA   |
| Right F1 | KRHTLTR | GCG     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RNDKLVP | GGG     | –                | CoDA   |

[ZF DNA Sequence](#)

**Blast** CCCCCGACNNNNNGGGGGGGCG

+ ZFN-unknown-SP-7-18  
 2664 cCCCTTCCGAACAAAAAGCAGCGGGCG 2690  
 2664 gGGGAAGGCTTGTTTTTCGTCGCCCCGc 2690

| FINGER | HELIX | TRIPLET | REFERENCE NUMBER | SOURCE |
|--------|-------|---------|------------------|--------|
|--------|-------|---------|------------------|--------|

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F1  | KRERLDR | GGG | – | CoDA |
| Left F2  | QQTNLTR | GAA | – | CoDA |
| Left F3  | RRDGLSG | TCG | – | CoDA |
| Right F1 | VPSKLAR | GGC | – | CoDA |
| Right F2 | RTDTLAR | GCG | – | CoDA |
| Right F3 | QKGTLGR | GCA | – | CoDA |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCTCCGANNNNNNNGCAGCGGGC

#### + ZFN-unknown-SP-5-16

2792 cCGCCCCGCACGCCTGGGGGATGCT 2816

2792 gGCGGGGCGTGCGGACCCCCTACGa 2816

| FINGER   | HELIX    | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|----------|---------|------------------|--------|
| Left F1  | KRHTLTR  | GCG     | –                | CoDA   |
| Left F2  | RREHLVR  | GGG     | –                | CoDA   |
| Left F3  | ANRTL VH | TGC     | –                | CoDA   |
| Right F1 | RSRNLL   | TGC     | –                | CoDA   |
| Right F2 | QSAHLKR  | GGA     | –                | CoDA   |
| Right F3 | RTEHLAR  | GGG     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCCCCGCANNNNNNGGGGATGCT

#### + ZFN-unknown-SP-6-17

2792 cCGCCCCGCACGCCTGGGGATGCTc 2817

2792 gGCGGGGCGTGCGGACCCCCTACGA 2817

| FINGER   | HELIX    | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|----------|---------|------------------|--------|
| Left F1  | KRHTLTR  | GCG     | –                | CoDA   |
| Left F2  | RREHLVR  | GGG     | –                | CoDA   |
| Left F3  | ANRTL VH | TGC     | –                | CoDA   |
| Right F1 | TKQVLDR  | GCT     | –                | CoDA   |
| Right F2 | VRHNLTR  | GAT     | –                | CoDA   |
| Right F3 | RGDKLGP  | GGG     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCCCCGCANNNNNNGGGGATGCT

#### + ZFN-unknown-SP-6-18

2835 cGCCAGCAGCGACTCGGAGGAGGAGa 2860

2835 gCGGTCTCTCTGAGCCTCCTCCTc 2860

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | APSKLAR | <u>GGC</u> | –                | CoDA   |
| Left F2  | QRSDLTR | <u>GCT</u> | –                | CoDA   |
| Left F3  | LRASLRR | <u>GCT</u> | –                | CoDA   |
| Right F1 | RQMNLDR | <u>GAG</u> | –                | CoDA   |
| Right F2 | RQDNLGR | <u>GAG</u> | –                | CoDA   |
| Right F3 | RVDNLPR | <u>GAG</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCCAGCAGCNNNNNGAGGAGGAG

+ ZFN-unknown-SP-5-17

2835 cGCCAGCAGCGACTCGGAGGAGGAg 2859

2835 gCGGTCGTCGCTGAGCCTCCTCCTc 2859

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | APSKLAR | <u>GGC</u> | –                | CoDA   |
| Left F2  | QRSDLTR | <u>GCT</u> | –                | CoDA   |
| Left F3  | LRASLRR | <u>GCT</u> | –                | CoDA   |
| Right F1 | RTDRLIR | <u>GGA</u> | –                | CoDA   |
| Right F2 | QSAHLKR | <u>GGA</u> | –                | CoDA   |
| Right F3 | QMSHLKR | <u>GGA</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCCAGCAGCNNNNNGGAGGAGGA

+ ZFN-unknown-SP-5-18

2838 cAGCAGCGACTCGGAGGAGGAGACc 2862

2838 gTCGTCGCTGAGCCTCCTCCTCTGg 2862

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | MKNTLTR | <u>GCT</u> | –                | CoDA   |
| Left F2  | QRSDLTR | <u>GCT</u> | –                | CoDA   |
| Left F3  | DRSSLRR | <u>GTC</u> | –                | CoDA   |
| Right F1 | DEANLRR | <u>GAC</u> | –                | CoDA   |
| Right F2 | QSAHLKR | <u>GGA</u> | –                | CoDA   |
| Right F3 | QMSHLKR | <u>GGA</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast AGCAGCGACNNNNNGGAGGAGAC

+

ZFN-unknown-SP-6-19

2892 cCGCGACTCCACCTCCGAGGCGGGCa 2917  
 2892 gGCGCTGAGGTGGAGGCTCCGCCCGt 2917

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RRHGLDR | GCG     | –                | CoDA   |
| Left F2  | DHSSLKR | GTC     | –                | CoDA   |
| Left F3  | QTTHLSR | GGA     | –                | CoDA   |
| Right F1 | VPSKLAR | GGC     | –                | CoDA   |
| Right F2 | RTDTLAR | GCG     | –                | CoDA   |
| Right F3 | RRDNLLR | GAG     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast CGCGACTCCNNNNNNGAGGCGGGC

⊞ ZFN-unknown-SP-6-20  
 2994 gGGCAGCCCCACGCCC GCCGACGCGc 3019  
 2994 cCCGTCGGGTGCGGGCGGCTGCGCg 3019

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DRRTLDR | GCC     | –                | CoDA   |
| Left F2  | QRSDLTR | GCT     | –                | CoDA   |
| Left F3  | RTEHLAR | GGG     | –                | CoDA   |
| Right F1 | KHDTLHR | GCG     | –                | CoDA   |
| Right F2 | DRGNLTR | GAC     | –                | CoDA   |
| Right F3 | DKSVLAR | GCC     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast GGCAGCCCCNNNNNNGCCGACGCG

⊞ ZFN-unknown-SP-7-19  
 3011 cCGACGCGCAGGGATCC TGTGGGGTg 3037  
 3011 gGCTGCGCGTCCCTAGGACACCCCCAc 3037

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KNNDLLK | TCG     | –                | CoDA   |
| Left F2  | RTDTLAR | GCG     | –                | CoDA   |
| Left F3  | QRRSLGH | TGC     | –                | CoDA   |
| Right F1 | RQSRLQR | GGT     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | QRHGLSS | TGT     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast CGACGCGCANNNNNNNTGTGGGGGT

⊕ ZFN-unknown-SP-6-21

3674 gCGCCCCGGCGCGGGG**GCGGCGGTG**c 3699

3674 c**GCGGGGCCG**CGCCCCGCCGCCACg 3699

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | KRHTLTR | <b>GCG</b> | –                | CoDA   |
| Left F2  | RREHLVR | <b>GGG</b> | –                | CoDA   |
| Left F3  | EHRGLKR | <b>GCC</b> | –                | CoDA   |
| Right F1 | RNFILAR | <b>GTG</b> | –                | CoDA   |
| Right F2 | RTDTLAR | <b>GCG</b> | –                | CoDA   |
| Right F3 | RVDDLGR | <b>GCG</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast CGCCCCGGCNNNNNNGCGGCGGTG

⊕ ZFN-unknown-SP-6-22

3755 gCCCCGCGGAGCAGCA**GCA****GCGGCG**g 3780

3755 c**GGGGCGCCT**CGTCGTCGTCGCCGc 3780

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RGNHLRR | <b>GGG</b> | –                | CoDA   |
| Left F2  | RTDTLAR | <b>GCG</b> | –                | CoDA   |
| Left F3  | DKRSLPH | <b>TCC</b> | –                | CoDA   |
| Right F1 | RSNTLLR | <b>GCG</b> | –                | CoDA   |
| Right F2 | RTDTLAR | <b>GCG</b> | –                | CoDA   |
| Right F3 | QKGTLLR | <b>GCA</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast CCCCCGCGANNNNNNGCAGCGGCG

⊕ ZFN-unknown-SP-5-19

3772 cAGCGGCGGCGCCCC**GTTGCGGGC**g 3796

3772 g**TCGGCGCCG**CGGGGCAACGCCCGc 3796

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | LRTSLVR | <b>GCT</b> | –                | CoDA   |
| Left F2  | DSSVLRR | <b>GCC</b> | –                | CoDA   |
| Left F3  | ERRGLAR | <b>GCC</b> | –                | CoDA   |
| Right F1 | VPSKLAR | <b>GGC</b> | –                | CoDA   |
| Right F2 | RTDTLAR | <b>GCG</b> | –                | CoDA   |
| Right F3 | IRTSLKR | <b>GTT</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast AGCGGCGGCNNNNNGTTGCGGGC

+ ZFN-unknown-SP-5-20

3775 cGGCGGCGCCCCGTTGCGGGGGGg 3799

3775 gCCGCCGCGGGGCAACGCCCCCCCc 3799

| FINGER   | HELIX  | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|--------|---------|------------------|--------|
| Left F1  | DGSTLR | GCC     | —                | CoDA   |
| Left F2  | DSSVLR | GCC     | —                | CoDA   |
| Left F3  | ENSKLR | GCG     | —                | CoDA   |
| Right F1 | RKHHLR | GGG     | —                | CoDA   |
| Right F2 | LKEHLR | GCG     | —                | CoDA   |
| Right F3 | RKDGLR | GCG     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GGCGGCGCCNNNNNGCGGGCGGG

+ ZFN-unknown-SP-5-21

3857 tCTCTTCCCCCTGCGGCCGGGGGg 3881

3857 aGAGAGGGGGGACGCGCGCCGCCCCc 3881

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KHSNLTR | GAG     | —                | CoDA   |
| Left F2  | QQTNLTR | GAA     | —                | CoDA   |
| Left F3  | RIDKLGG | GGG     | —                | CoDA   |
| Right F1 | RKHHLGR | GGG     | —                | CoDA   |
| Right F2 | LKEHLTR | GCG     | —                | CoDA   |
| Right F3 | DPSNLRR | GCC     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CTCTTCCCCNNNNNGCGGGCGGG

+ ZFN-unknown-SP-5-22

3861 tTCCCCCTGCGGCCGCGGGGGGg 3885

3861 aAGGGGGACGCCGCGCCCCCCCc 3885

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | TSAHLAR | GGA     | —                | CoDA   |
| Left F2  | RREHLVR | GGG     | —                | CoDA   |
| Left F3  | QTATLKR | GCA     | —                | CoDA   |
| Right F1 | TNSKLTR | GCG     | —                | CoDA   |
| Right F2 | RREHLVR | GGG     | —                | CoDA   |
| Right F3 | RTDSLPR | GCG     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TCCCCCTGCNNNNNGCGGGGGGC

⊞ ZFN-unknown-SP-5-23

3864 cCCCTGCGGCCGCGGGGGCGCGc 3888

3864 gGGGACGCCCGCCGCCCCCGCGCg 3888

| FINGER   | HELIX    | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|----------|---------|------------------|--------|
| Left F1  | RR AHLQN | GGG     | –                | CoDA   |
| Left F2  | QSTTLKR  | GCA     | –                | CoDA   |
| Left F3  | DPSNLRR  | GCC     | –                | CoDA   |
| Right F1 | RRHGLDR  | GCG     | –                | CoDA   |
| Right F2 | LKEHLTR  | GGC     | –                | CoDA   |
| Right F3 | RGDKLAL  | GGG     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCTGCGGCNNNNNGGGGGCGCG

⊞ ZFN-unknown-SP-5-24

4115 gCGCGCCCCCGCGCGCCGTCGCCc 4139

4115 cGCGCGGGGCGCGCCGGCAGCGGg 4139

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RRHGLDR | GCG     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | RGDKLAL | GGG     | –                | CoDA   |
| Right F1 | DSPTLRR | GCC     | –                | CoDA   |
| Right F2 | DHSSLKR | GTC     | –                | CoDA   |
| Right F3 | DPSNLRR | GCC     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCGCCCCNNNNNGCCGTCGCC

⊞ ZFN-unknown-SP-5-25

4151 aGTCCGCCCCGCGCCGCCGCCGCCc 4175

4151 tCAGCGGGGCGCGGCGGCGGGg 4175

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DPSNLIR | GAC     | –                | CoDA   |
| Left F2  | RTDTLAR | GCG     | –                | CoDA   |
| Left F3  | RKHRLDG | GGG     | –                | CoDA   |
| Right F1 | DGSTLRR | GCC     | –                | CoDA   |

|          |         |            |   |      |
|----------|---------|------------|---|------|
| Right F2 | DSSVLRR | <u>GCC</u> | – | CoDA |
| Right F3 | ERRGLAR | <u>GCC</u> | – | CoDA |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast GTCCGCCCCNNNNNGCCGCCGCC

+ ZFN-unknown-SP-6-23

4164 cCGCCGCCGCCCGTGGTGTCTGCg 4189

4164 gCGGCGGGCGGGGCACCACAGACGc 4189

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RSNTLLR | <u>GCG</u> | –                | CoDA   |
| Left F2  | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Left F3  | RVDDLGR | <u>GCG</u> | –                | CoDA   |
| Right F1 | RKRNLIM | <u>TGC</u> | –                | CoDA   |
| Right F2 | DHSSLKR | <u>GTC</u> | –                | CoDA   |
| Right F3 | QPHHLPR | <u>GGT</u> | –                | CoDA   |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast CGCCGCCGNNNNNNGGTGTCTGC

+ ZFN-unknown-SP-7-20

4212 cGCCGCCCGCCGTGCCGTGGACGCGc 4238

4212 gCGGCGGGCGGCACGGCCACCTGCGCg 4238

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | SKHKLER | <u>GGC</u> | –                | CoDA   |
| Left F2  | LKEHLTR | <u>GGC</u> | –                | CoDA   |
| Left F3  | RKDGLTR | <u>GCG</u> | –                | CoDA   |
| Right F1 | KHDTLHR | <u>GCG</u> | –                | CoDA   |
| Right F2 | DRGNLTR | <u>GAC</u> | –                | CoDA   |
| Right F3 | RGDALAR | <u>GTG</u> | –                | CoDA   |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast GCCGCCCGCNNNNNNGTGGACGCG

+ ZFN-unknown-SP-6-24

4369 cGGCACCAACACCCCCGGTGGCGCCc 4394

4369 gCCGTGGTTGTGGGGCCACGGCGGg 4394

| FINGER  | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|---------|---------|------------|------------------|--------|
| Left F1 | SKKSLTR | <u>GCC</u> | –                | CoDA   |
| Left F2 | EAHHLR  | <u>GGT</u> | –                | CoDA   |

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F3  | IRTSLKR | GTT | – | CoDA |
| Right F1 | DGSTLR  | GCC | – | CoDA |
| Right F2 | DSSVLRR | GCC | – | CoDA |
| Right F3 | LTQGLRR | GGT | – | CoDA |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GGCA CCAACNNNNNNGGTGCCGCC

#### + ZFN-unknown-SP-7-21

4386 gTGCCGCCCCCACGCCGCGGAGGGGg 4412

4386 cACGCGCGGGGGGTGCGGCGCCTCCCCc 4412

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SPEQLAR | GCA     | –                | CoDA   |
| Left F2  | RTDTLAR | GCG     | –                | CoDA   |
| Left F3  | RKHRLDG | GGG     | –                | CoDA   |
| Right F1 | RNTHLAR | GGG     | –                | CoDA   |
| Right F2 | RQDNLGR | GAG     | –                | CoDA   |
| Right F3 | RHAALLS | GCG     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast TGCCGCCCCNNNNNNGCGGAGGGG

#### + ZFN-unknown-SP-6-25

4387 tGCCGCCCCCACGCCGCGGAGGGGg 4412

4387 aCGGCGGGGGGTGCGGCGCCTCCCCc 4412

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SKHKLER | GGC     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | RGDKLAL | GGG     | –                | CoDA   |
| Right F1 | RNTHLAR | GGG     | –                | CoDA   |
| Right F2 | RQDNLGR | GAG     | –                | CoDA   |
| Right F3 | RHAALLS | GCG     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GCGCCCCNNNNNNGCGGAGGGG

#### + ZFN-unknown-SP-7-22

4389 cCGCCCCCACGCCGCGGAGGGGCGGg 4415

4389 gCGGCGGGGTGCGGCGCCTCCCCCGCc 4415

| FINGER | HELIX | TRIPLET | REFERENCE NUMBER | SOURCE |
|--------|-------|---------|------------------|--------|
|--------|-------|---------|------------------|--------|

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F1  | KRHTLTR | GCG | – | CoDA |
| Left F2  | RREHLVR | GGG | – | CoDA |
| Left F3  | RMDHLAG | TGG | – | CoDA |
| Right F1 | KRHTLTR | GCG | – | CoDA |
| Right F2 | RREHLVR | GGG | – | CoDA |
| Right F3 | RRDNLLR | GAG | – | CoDA |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCCCCCANNNNNNNGAGGGGGCG

#### + ZFN-unknown-SP-6-26

4389 cCGCCCCCACGCCGC**GGA**GGGG**GCG**g 4414

4389 g**GCG**GGGG**TG**CGGCGCCTCCCCCGc 4414

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KRHTLTR | GCG     | –                | CoDA   |
| Left F2  | RREHLVR | GGG     | –                | CoDA   |
| Left F3  | RMDHLAG | TGG     | –                | CoDA   |
| Right F1 | TNSKLTR | GCG     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | QTTHLRR | GGA     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCCCCCANNNNNNNGAGGGGGC

#### + ZFN-unknown-SP-6-27

4390 cGCCCCCACGCCGCG**GAG**GGGG**GCG**g 4415

4390 g**GCG**GGGG**TG**CGGCGCCTCCCCCGc 4415

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | TNSKLTR | GCG     | –                | CoDA   |
| Left F2  | RREHLVR | GGG     | –                | CoDA   |
| Left F3  | RPDALPR | GTG     | –                | CoDA   |
| Right F1 | KRHTLTR | GCG     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RRDNLLR | GAG     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCCCCCACNNNNNNNGAGGGGGCG

#### + ZFN-unknown-SP-5-26

4390 cGCCCCCACGCCGC**GGA**GGGG**GCG**g 4414

4390 g**GCG**GGGG**TG**CGGCGCCTCCCCCGc 4414

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | TNSKLTR | <u>GGC</u> | –                | CoDA   |
| Left F2  | RREHLVR | <u>GGG</u> | –                | CoDA   |
| Left F3  | RPDALPR | <u>GTG</u> | –                | CoDA   |
| Right F1 | TNSKLTR | <u>GGC</u> | –                | CoDA   |
| Right F2 | RREHLVR | <u>GGG</u> | –                | CoDA   |
| Right F3 | QTTHLRR | <u>GGA</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCCCCCACNNNNNGGAGGGGGC

+ ZFN-unknown-SP-7-23

4417 gCCCCGCCCCCGGAAGAGGCGCGGGTc 4443

4417 cGGGCGGGGGCCTTCTCCGCGCCCAg 4443

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | VPSKLAR | <u>GGC</u> | –                | CoDA   |
| Left F2  | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Left F3  | RKHRLDG | <u>GGG</u> | –                | CoDA   |
| Right F1 | TKQKLQT | <u>GGT</u> | –                | CoDA   |
| Right F2 | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Right F3 | ESGHLKR | <u>GGC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCCCGCCCCNNNNNNGGCGCGGGT

+ ZFN-unknown-SP-6-28

4418 gCCCCGCCCCCGGAAGAGGCGCGGGTc 4443

4418 cGGGCGGGGCCTTCTCCGCGCCCAg 4443

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RKHHLGR | <u>GGG</u> | –                | CoDA   |
| Left F2  | LKEHLTR | <u>GGC</u> | –                | CoDA   |
| Left F3  | RGDKLAL | <u>GGG</u> | –                | CoDA   |
| Right F1 | TKQKLQT | <u>GGT</u> | –                | CoDA   |
| Right F2 | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Right F3 | ESGHLKR | <u>GGC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCGCCCCNNNNNNGGCGCGGGT

+

ZFN-unknown-SP-5-27

4498 gCCCCTCGCCCCCA~~GGG~~GGTGGGg 4522  
 4498 c~~GGG~~GAGC~~GGG~~GGGGTCCCCACCCc 4522

| FINGER   | HELIX   | TRIPLET        | REFERENCE NUMBER | SOURCE |
|----------|---------|----------------|------------------|--------|
| Left F1  | RNTHLAR | <del>GGG</del> | –                | CoDA   |
| Left F2  | RQDNLGR | <del>GAG</del> | –                | CoDA   |
| Left F3  | KNHSLNN | <del>GGC</del> | –                | CoDA   |
| Right F1 | KGDHLRR | <del>GGG</del> | –                | CoDA   |
| Right F2 | EAHHLSR | <del>GGT</del> | –                | CoDA   |
| Right F3 | RTEHLAR | <del>GGG</del> | –                | CoDA   |

[ZF DNA Sequence](#)

CCCCTCGCCNNNNNNGGGGTGGG

⊞ ZFN-unknown-SP-6-29  
 4498 gCCCCTCGCCCCCAG~~GGG~~GTGGGg 4523  
 4498 c~~GGG~~GAGC~~GGG~~GGGGTCCCCACCCCc 4523

| FINGER   | HELIX   | TRIPLET        | REFERENCE NUMBER | SOURCE |
|----------|---------|----------------|------------------|--------|
| Left F1  | RNTHLAR | <del>GGG</del> | –                | CoDA   |
| Left F2  | RQDNLGR | <del>GAG</del> | –                | CoDA   |
| Left F3  | KNHSLNN | <del>GGC</del> | –                | CoDA   |
| Right F1 | KKDHLHR | <del>GGG</del> | –                | CoDA   |
| Right F2 | RREVLEN | <del>GTG</del> | –                | CoDA   |
| Right F3 | RQGHLKR | <del>GGG</del> | –                | CoDA   |

[ZF DNA Sequence](#)

CCCCTCGCCNNNNNNGGGGTGGGG

⊞ ZFN-unknown-SP-7-24  
 4500 cCCTCGCCCCCAGGGG~~GTG~~GGGGCCa 4526  
 4500 g~~GGA~~GCG~~GGG~~GGTCCCCACCCCCGGt 4526

| FINGER   | HELIX   | TRIPLET        | REFERENCE NUMBER | SOURCE |
|----------|---------|----------------|------------------|--------|
| Left F1  | RSSHLKM | <del>AGG</del> | –                | CoDA   |
| Left F2  | RTDTLAR | <del>GCG</del> | –                | CoDA   |
| Left F3  | RKHRLDG | <del>GGG</del> | –                | CoDA   |
| Right F1 | SHTVLTR | <del>GCC</del> | –                | CoDA   |
| Right F2 | RREHLVR | <del>GGG</del> | –                | CoDA   |
| Right F3 | RPDALPR | <del>GTG</del> | –                | CoDA   |

[ZF DNA Sequence](#)

CCTCGCCCCNNNNNNGTGGGGGCC

⊕ ZFN-unknown-SP-6-30

4500 cCCTCGCCCCCAGGGGGTGGGGGCc 4525

4500 gGGA GCGGGGGGTCCCCACCCCGg 4525

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RSSHLKM | AGG     | –                | CoDA   |
| Left F2  | RTDTLAR | GCG     | –                | CoDA   |
| Left F3  | RKHRLDG | GGG     | –                | CoDA   |
| Right F1 | TNSKLTR | GGC     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | VDHHLRR | GGT     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast CCTCGCCCCNNNNNNGGTGGGGGC

⊕ ZFN-unknown-SP-7-25

4587 tCGCCCCGGCGTCCGCGGGCGCCGCGc 4613

4587 aGCGGGGCGCAGGCGCCCGCGGCGCg 4613

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KRHTLTR | GCG     | –                | CoDA   |
| Left F2  | RREHLVR | GGG     | –                | CoDA   |
| Left F3  | EHRGLKR | GCC     | –                | CoDA   |
| Right F1 | RLRDLPR | GCG     | –                | CoDA   |
| Right F2 | DSSVLRR | GCC     | –                | CoDA   |
| Right F3 | ENSKLNR | GGC     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast CGCCCCGGCNNNNNNGGCGCCGCG

⊕ ZFN-unknown-SP-7-26

4623 cGTCTCCGTCGTCCCAGGCCGCGGTCg 4649

4623 gCAGAGGCAGCAGGGTCCGGCGCCAGc 4649

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DEANLRR | GAC     | –                | CoDA   |
| Left F2  | QSAHLKR | GGA     | –                | CoDA   |
| Left F3  | DPSNLRR | GAC     | –                | CoDA   |
| Right F1 | TSTLLNR | GTC     | –                | CoDA   |
| Right F2 | RTDTLAR | GCG     | –                | CoDA   |
| Right F3 | ERRGLAR | GCC     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

**Blast** GTCTCCGTCNNNNNNNGCCGCGGTC

⊕ ZFN-unknown-SP-7-27

4626 cTCCGTCGTCCCAGGCCGCGGTCGCCg 4652

4626 gAGGCAGCAGGGTCCGGCGCCAGCGGc 4652

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RPAKLVL | GGA     | —                | CoDA   |
| Left F2  | DRGNLTR | GAC     | —                | CoDA   |
| Left F3  | DQGNLIR | GAC     | —                | CoDA   |
| Right F1 | DSPTLRR | GCC     | —                | CoDA   |
| Right F2 | DHSSLKR | GTC     | —                | CoDA   |
| Right F3 | RTDLLRR | GCG     | —                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

**Blast** TCCGTCGTCCNNNNNNNGCGGTCCGCC

⊕ ZFN-unknown-SP-7-28

4629 cGTCGTCCCAGGCCGCGGTCGCCGCCg 4655

4629 gCAGCAGGGTCCGGCGCCAGCGGCGGc 4655

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | EESNLRR | GAC     | —                | CoDA   |
| Left F2  | DRGNLTR | GAC     | —                | CoDA   |
| Left F3  | RSDHLSL | TGG     | —                | CoDA   |
| Right F1 | DGSTLRR | GCC     | —                | CoDA   |
| Right F2 | DSSVLRR | GCC     | —                | CoDA   |
| Right F3 | EGGALRR | GTC     | —                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

**Blast** GTCGTCCCANNNNNNNGTCCGCCGCC

⊕ ZFN-unknown-SP-7-29

4755 cCTCCGCCTCTTCTCTGCGGGCGGGg 4781

4755 gGAGGCGGAGAAGGAGACGCCCCCCCc 4781

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RMSNLDR | GAG     | —                | CoDA   |
| Left F2  | RTDTLAR | GCG     | —                | CoDA   |
| Left F3  | RRDNLRR | GAG     | —                | CoDA   |
| Right F1 | RKHHLGR | GGG     | —                | CoDA   |
| Right F2 | LKEHLTR | GGC     | —                | CoDA   |
| Right F3 | RKDGLTR | GCG     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CTCCGCCTCNNNNNNNGCGGGCGGG

## + ZFN-unknown-SP-7-30

4758 cCGCCTCTTCCTCTGCGGGCGGGGCTg 4784

4758 gGCGGAGAGGAGACGCCCGCCCCGAc 4784

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RKLGLLR | GCG     | —                | CoDA   |
| Left F2  | RQDNLGR | GAG     | —                | CoDA   |
| Left F3  | QRNNLGR | GAA     | —                | CoDA   |
| Right F1 | THSMLAR | GCT     | —                | CoDA   |
| Right F2 | RREHLVR | GGG     | —                | CoDA   |
| Right F3 | ESGHLKR | GGC     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCCTCTCNNNNNNNGCGGGGGCT

## + ZFN-unknown-SP-7-31

4761 cCTCTTCCTCTGCGGGCGGGGCTGGTg 4787

4761 gGAGAGGAGACGCCCGCCCCGACCAC 4787

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | KHSNLTR | GAG     | —                | CoDA   |
| Left F2  | QQTNLTR | GAA     | —                | CoDA   |
| Left F3  | RRDNLNR | GAG     | —                | CoDA   |
| Right F1 | RRQKLTI | GGT     | —                | CoDA   |
| Right F2 | QRSDLTR | GCT     | —                | CoDA   |
| Right F3 | RTEHLAR | GGG     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CTCTTCCTCNNNNNNNGGGGCTGGT

## + ZFN-unknown-SP-7-32

4764 cTTCCTCTGCGGGCGGGGCTGGTGGGa 4790

4764 gAAGGAGACGCCCGCCCCGACCACCCT 4790

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | QASNLLR | GAA     | —                | CoDA   |
| Left F2  | RQDNLGR | GAG     | —                | CoDA   |
| Left F3  | QSNVLSR | GCA     | —                | CoDA   |
| Right F1 | KGDHLRR | GGG     | —                | CoDA   |

|          |         |            |   |      |
|----------|---------|------------|---|------|
| Right F2 | EAHHLSR | <u>GGT</u> | – | CoDA |
| Right F3 | EGSGLKR | <u>GCT</u> | – | CoDA |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TTCCTCTGCNNNNNNNGCTGGTGGG

+ ZFN-unknown-SP-7-33

4791 gCGTCGCGTCCGCGTCCGGCGCTGGGg 4817

4791 cGCAGCGAGGCGCAGGCCGCGACCCc 4817

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RSQTLAQ | <u>ACG</u> | –                | CoDA   |
| Left F2  | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Left F3  | DPSNLRR | <u>GAC</u> | –                | CoDA   |
| Right F1 | KKDHLHR | <u>GGG</u> | –                | CoDA   |
| Right F2 | QRSDLTR | <u>GCT</u> | –                | CoDA   |
| Right F3 | ESGHLRR | <u>GGC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGTCGCGTCNNNNNNNGGCGCTGGG

+ ZFN-unknown-SP-7-34

4794 tCGCGTCCGCGTCCGGCGCTGGGGAGa 4820

4794 aGCGCAGGCGCAGGCCGCGACCCCTct 4820

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | KHDTLHR | <u>GCG</u> | –                | CoDA   |
| Left F2  | DRGNLTR | <u>GAC</u> | –                | CoDA   |
| Left F3  | RRDGLTR | <u>GCG</u> | –                | CoDA   |
| Right F1 | RNTNLTR | <u>GAG</u> | –                | CoDA   |
| Right F2 | RREHLVR | <u>GGG</u> | –                | CoDA   |
| Right F3 | VSNSLAR | <u>GCT</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCGTCCGCNNNNNNNGCTGGGGAG

+ ZFN-unknown-SP-6-31

4797 cGTCCGCGTCCGGCGCTGGGGAGAGa 4822

4797 gCAGGCGCAGGCCGCGACCCCTCTct 4822

| FINGER  | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|---------|---------|------------|------------------|--------|
| Left F1 | DPSNLIR | <u>GAC</u> | –                | CoDA   |
| Left F2 | RTDTLAR | <u>GCG</u> | –                | CoDA   |

|          |         |                     |   |      |
|----------|---------|---------------------|---|------|
| Left F3  | DPSNLRR | <a href="#">GAC</a> | – | CoDA |
| Right F1 | KHSNLTR | <a href="#">GAG</a> | – | CoDA |
| Right F2 | QSAHLKR | <a href="#">GGA</a> | – | CoDA |
| Right F3 | RSDHLSL | <a href="#">TGG</a> | – | CoDA |

[ZF DNA Sequence](#)

**Blast**

⊞ ZFN-unknown-SP-6-32  
 4831 cTCCCTCGGCCCCCGC[GCTGCTGCG](#)c 4856  
 4831 g[AGG](#)[GAG](#)[CCG](#)GGGGCGCGACGACGCg 4856

| FINGER   | HELIX     | TRIPLET             | REFERENCE NUMBER | SOURCE |
|----------|-----------|---------------------|------------------|--------|
| Left F1  | THAHLTR   | <a href="#">GGA</a> | –                | CoDA   |
| Left F2  | RQDNLGR   | <a href="#">GAG</a> | –                | CoDA   |
| Left F3  | DKSVLAR   | <a href="#">GCC</a> | –                | CoDA   |
| Right F1 | RKGTLDLDR | <a href="#">GCG</a> | –                | CoDA   |
| Right F2 | QRSDLTR   | <a href="#">GCT</a> | –                | CoDA   |
| Right F3 | LRASLRR   | <a href="#">GCT</a> | –                | CoDA   |

[ZF DNA Sequence](#)

**Blast**

⊞ ZFN-unknown-SP-5-28  
 4837 cGGCCCCCGCGCTGC[TGC](#)[GCC](#)[GCG](#)g 4861  
 4837 g[CCG](#)[GGG](#)[GCG](#)CGACGACGCGGCGCc 4861

| FINGER   | HELIX   | TRIPLET             | REFERENCE NUMBER | SOURCE |
|----------|---------|---------------------|------------------|--------|
| Left F1  | SHTVLTR | <a href="#">GCC</a> | –                | CoDA   |
| Left F2  | RREHLVR | <a href="#">GGG</a> | –                | CoDA   |
| Left F3  | RTDSLPR | <a href="#">GCG</a> | –                | CoDA   |
| Right F1 | RLRDLPR | <a href="#">GCG</a> | –                | CoDA   |
| Right F2 | DSSVLRR | <a href="#">GCC</a> | –                | CoDA   |
| Right F3 | QGRSLRA | <a href="#">TGC</a> | –                | CoDA   |

[ZF DNA Sequence](#)

**Blast**

⊞ ZFN-unknown-SP-6-33  
 4845 gCGCTGCTGCGCCGCG[GGG](#)[GCC](#)[GAG](#)g 4870  
 4845 c[CCG](#)[ACG](#)[ACG](#)CGGCGCCCCCGGCTCc 4870

| FINGER | HELIX | TRIPLET | REFERENCE NUMBER | SOURCE |
|--------|-------|---------|------------------|--------|
|--------|-------|---------|------------------|--------|

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F1  | RRHTLTR | GCG | – | CoDA |
| Left F2  | QSTTLKR | GCA | – | CoDA |
| Left F3  | QPNTLTR | GCA | – | CoDA |
| Right F1 | KKTNLTR | GAG | – | CoDA |
| Right F2 | DSSVLRR | GCC | – | CoDA |
| Right F3 | RTEHLAR | GGG | – | CoDA |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCTGCTGCNNNNNNGGGCCGAG

#### ⊕ ZFN-unknown-SP-6-34

4848 cTGCTGCGCCCGGGGGCCGAGGAAg 4873

4848 gACGACGCGGCGCCCCGGCTCCTTc 4873

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | QRGTLNR | GCA     | –                | CoDA   |
| Left F2  | QSTTLKR | GCA     | –                | CoDA   |
| Left F3  | DGGHLTR | GGC     | –                | CoDA   |
| Right F1 | QASNLLR | GAA     | –                | CoDA   |
| Right F2 | RQDNLGR | GAG     | –                | CoDA   |
| Right F3 | DKSVLAR | GCC     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TGCTGCGCCNNNNNNGCCGAGGAA

#### ⊕ ZFN-unknown-SP-5-29

5112 cCGCGGCCCCCGCGTGGAGCCGCCg 5136

5112 gCCGCCGGGGCGGCACCTCGGCGGc 5136

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RLRDLPR | GCG     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | RTEHLAR | GGG     | –                | CoDA   |
| Right F1 | DGSTLRR | GCC     | –                | CoDA   |
| Right F2 | DSSVLRR | GCC     | –                | CoDA   |
| Right F3 | QNSHLRR | GGA     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCGGCCCCNNNNNGGAGCCGCC

#### ⊕ ZFN-unknown-SP-5-30

5115 cGGCCCCCGCGTGGA GCCGCCGCAc 5139

5115 gCCGGGGGCGCACCTCGGCGGCGTg 5139

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | SHTVLTR | <u>GCC</u> | –                | CoDA   |
| Left F2  | RREHLVR | <u>GGG</u> | –                | CoDA   |
| Left F3  | RTDSLPR | <u>GCG</u> | –                | CoDA   |
| Right F1 | LNHTLKR | <u>GCA</u> | –                | CoDA   |
| Right F2 | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Right F3 | ERRGLAR | <u>GCC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GGCCCCCGCNNNNNGCCGCCGCA

+ ZFN-unknown-SP-7-35

5186 cCGACGCCCCCGCGTCGAGTGGAAc 5212

5186 gGCTGCGGGGGCGCGAGCCTCACCTTg 5212

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | KNNDLLK | <u>TCG</u> | –                | CoDA   |
| Left F2  | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Left F3  | RKHRLDG | <u>GGG</u> | –                | CoDA   |
| Right F1 | HKPNLHR | <u>GAA</u> | –                | CoDA   |
| Right F2 | RREVLEN | <u>GTG</u> | –                | CoDA   |
| Right F3 | QKPHLSR | <u>GGA</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGACGCCCCNNNNNNGGAGTGGAA

+ ZFN-unknown-SP-7-36

5187 cGACGCCCCCGCGTCGAGTGGAAAc 5213

5187 gCTGCGGGGGCGCGAGCCTCACCTTgt 5213

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | TGAVLTR | <u>GTC</u> | –                | CoDA   |
| Left F2  | LKEHLTR | <u>GGC</u> | –                | CoDA   |
| Left F3  | RGDKLAL | <u>GGG</u> | –                | CoDA   |
| Right F1 | GPTALVN | <u>AAC</u> | –                | CoDA   |
| Right F2 | RREHLTI | <u>TGG</u> | –                | CoDA   |
| Right F3 | RRDNLNR | <u>GAG</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GACGCCCCNNNNNNGAGTGGAAc

+

ZFN-unknown-SP-6-35

5187 cGACGCCCCCGCGTCGGAGTGGAAc 5212  
 5187 gCTGCGGGGGCGCAGCCTCACCTTg 5212

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | TGAVLTR | GTC     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | RGDKLAL | GGG     | –                | CoDA   |
| Right F1 | HKPNLHR | GAA     | –                | CoDA   |
| Right F2 | RREVLEN | GTG     | –                | CoDA   |
| Right F3 | QKPHLSR | GGA     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow ) Build 3.1

Blast GACGCCCCNNNNNNGGAGTGGAA

⊞ ZFN-unknown-SP-7-37  
 5294 tCGGCCACCCGTGGTCTCGGGAGCAg 5320  
 5294 aCGCGGTGGGCACCAGAGCCCTCGTc 5320

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RRHGLDR | GCG     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | MGHHLKR | GGT     | –                | CoDA   |
| Right F1 | KNTRLVS | GCA     | –                | CoDA   |
| Right F2 | QSAHLKR | GGA     | –                | CoDA   |
| Right F3 | RGDSLKK | TCG     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow ) Build 3.1

Blast CGGCCACCCNNNNNNNTCGGGAGCA

⊞ ZFN-unknown-SP-6-36  
 5420 cACCGCCGAGGCGCCTCGGGGGCAg 5445  
 5420 gTGGCCGGCTCCGCGAGCCCCGTc 5445

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RQSRLQR | GGT     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | RRDGLSG | TCG     | –                | CoDA   |
| Right F1 | DRSQLAR | GCA     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RMDSLGG | TCG     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow ) Build 3.1

Blast ACCGGCCGANNNNNNNTCGGGGGCA

⊕ ZFN-unknown-SP-7-38

5667 cAGCTCCCCCGCGCAGG**GGG****GCC****GGG**g 5693

5667 g**TCG****AGG****GGG**CGCGTCCCCCGGCCCCc 5693

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | TTQALRR | <b>GCT</b> | –                | CoDA   |
| Left F2  | QSAHLKR | <b>GGA</b> | –                | CoDA   |
| Left F3  | RTEHLAR | <b>GGG</b> | –                | CoDA   |
| Right F1 | KGDHLRR | <b>GGG</b> | –                | CoDA   |
| Right F2 | DSSVLRR | <b>GCC</b> | –                | CoDA   |
| Right F3 | RTEHLAR | <b>GGG</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

**Blast** AGCTCCCCNNNNNNNGGGGCCGGG

⊕ ZFN-unknown-SP-5-31

5669 gCTCCCCCGCGCAGG**GGG****GCC****GGG**g 5693

5669 c**GAG****GGG****GCG**CGTCCCCCGGCCCCc 5693

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RNTNLTR | <b>GAG</b> | –                | CoDA   |
| Left F2  | RREHLVR | <b>GGG</b> | –                | CoDA   |
| Left F3  | RTDSLPR | <b>GCG</b> | –                | CoDA   |
| Right F1 | KGDHLRR | <b>GGG</b> | –                | CoDA   |
| Right F2 | DSSVLRR | <b>GCC</b> | –                | CoDA   |
| Right F3 | RTEHLAR | <b>GGG</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

**Blast** CTCCCCCGCNNNNNGGGGCCGGG

⊕ ZFN-unknown-SP-7-39

5735 aAGCCGCCCCACCCCC**GAG****GCC****TGT**t 5761

5735 t**TCG****GCG****GGG**GTGGGGGCTCCGACAa 5761

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | KHQTLQR | <b>GCT</b> | –                | CoDA   |
| Left F2  | RTDTLAR | <b>GCG</b> | –                | CoDA   |
| Left F3  | RKHRLDG | <b>GGG</b> | –                | CoDA   |
| Right F1 | RKQHLTL | <b>TGT</b> | –                | CoDA   |
| Right F2 | DSSVLRR | <b>GCC</b> | –                | CoDA   |
| Right F3 | RVDNLPR | <b>GAG</b> | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast AGCCGCCCCNNNNNNGAGGCCTGT

+ ZFN-unknown-SP-6-37

5736 aGCCGCCCCCACCCTCCGAGGCGCTGTt 5761

5736 tCGGCGGGGGTGGGGGCTCCGGACAa 5761

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SKHKLER | GGC     | —                | CoDA   |
| Left F2  | LKEHLTR | GGC     | —                | CoDA   |
| Left F3  | RGDKLAL | GGG     | —                | CoDA   |
| Right F1 | RKQHLTL | TGT     | —                | CoDA   |
| Right F2 | DSSVLRR | GCC     | —                | CoDA   |
| Right F3 | RVDNLPR | GAG     | —                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GCCGCCCCCNNNNNNGAGGCCTGT

+ ZFN-unknown-SP-7-40

6073 gCACGCCCTCTGCCCCCGGGGACGGGt 6099

6073 cGTGCGGGAGACGGGGGCCCCCTGCCCa 6099

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SRFTLGR | GTG     | —                | CoDA   |
| Left F2  | LKEHLTR | GGC     | —                | CoDA   |
| Left F3  | RVDNLPR | GAG     | —                | CoDA   |
| Right F1 | KKDHLHR | GGG     | —                | CoDA   |
| Right F2 | DRGNLTR | GAC     | —                | CoDA   |
| Right F3 | RNHGLVR | GGG     | —                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast CACGCCCTCNNNNNNGGGGACGGG

+ ZFN-unknown-SP-7-41

6213 cCTCCTCACCTGGCTGGAGGAAAGGa 6239

6213 gGAGGAGTGGGACCGACCTCTTTCCt 6239

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RQMNLDL | GAG     | —                | CoDA   |
| Left F2  | RQDNLGR | GAG     | —                | CoDA   |
| Left F3  | VKHGLGR | GGT     | —                | CoDA   |
| Right F1 | RMAHLHA | AGG     | —                | CoDA   |
| Right F2 | QQTNLTR | GAA     | —                | CoDA   |
| Right F3 | QTTHLSR | GGA     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CTCCTCACNNNNNNNGGAGAAAGG

## + ZFN-unknown-SP-5-32

6318 cCCCTCCTTACCCTGGCTGCGGGGa 63426318 gGGGAGGAATGGGACCGACGCCCTt 6342

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | KKDHLHR | <u>GGG</u> | —                | CoDA   |
| Left F2  | QSAHLKR | <u>GGA</u> | —                | CoDA   |
| Left F3  | QRGNLNM | <u>TAA</u> | —                | CoDA   |
| Right F1 | RGNHLRR | <u>GGG</u> | —                | CoDA   |
| Right F2 | RTDTLAR | <u>GCG</u> | —                | CoDA   |
| Right F3 | LKHDLRR | <u>GCT</u> | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCTCCTTANNNNNNGCTGCGGGG

## + ZFN-unknown-SP-7-42

6318 cCCCTCCTTACCCTGGCTGCGGGGAGa 63446318 gGGGAGGAATGGGACCGACGCCCTt 6344

| FINGER   | HELIX    | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|----------|------------|------------------|--------|
| Left F1  | KKDHLHR  | <u>GGG</u> | —                | CoDA   |
| Left F2  | QSAHLKR  | <u>GGA</u> | —                | CoDA   |
| Left F3  | QRGNLNM  | <u>TAA</u> | —                | CoDA   |
| Right F1 | RNTNLTR  | <u>GAG</u> | —                | CoDA   |
| Right F2 | RREHLVR  | <u>GGG</u> | —                | CoDA   |
| Right F3 | ANRTL VH | <u>TGC</u> | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CCCTCCTTANNNNNNTGCGGGGAG

## + ZFN-unknown-SP-7-43

6341 gAGACTCCCATCGGGGCGAGGGGGCTc 63676341 cTCTGAGGGTAGCCCCGCTCCCCCGAg 6367

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | SKPNLKM | <u>TCT</u> | —                | CoDA   |
| Left F2  | RQDNLGR | <u>GAG</u> | —                | CoDA   |
| Left F3  | RMDHLAG | <u>TGG</u> | —                | CoDA   |
| Right F1 | THSMLAR | <u>GCT</u> | —                | CoDA   |

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Right F2 | RREHLVR | GGG | – | CoDA |
| Right F3 | RRDNLLR | GAG | – | CoDA |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast AGACTCCCANNNNNNGAGGGGGCT

#### + ZFN-unknown-SP-6-38

6544 cCCCGCCCGCGCCACGCGGTAGAGg 6569

6544 gGGGCGGGCGGGTGCGCCATCTCc 6569

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RKHHLGR | GGG     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | RKDGLTR | GCG     | –                | CoDA   |
| Right F1 | KHSNLTR | GAG     | –                | CoDA   |
| Right F2 | QRSSLVR | GTA     | –                | CoDA   |
| Right F3 | RRDDLTR | GCG     | –                | CoDA   |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast CCCGCCCGCNNNNNGCGGTAGAG

#### + ZFN-unknown-SP-6-39

6547 cGCCCCGCGCCACGCGGTAGAGGAAg 6572

6547 gCGGCGCGGGTGCGCCATCTCCTTc 6572

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | VPSKLAR | GGC     | –                | CoDA   |
| Left F2  | RTDTLAR | GCG     | –                | CoDA   |
| Left F3  | ESGHLKR | GGC     | –                | CoDA   |
| Right F1 | QASNLLR | GAA     | –                | CoDA   |
| Right F2 | RQDNLGR | GAG     | –                | CoDA   |
| Right F3 | QMNALQR | GTA     | –                | CoDA   |

ZF DNA Sequence

Bos taurus (cow) Build 3.1

Blast GCCCGCGCCNNNNNGTAGAGGAA

#### + ZFN-unknown-SP-6-40

6550 cCGCGCCACGCGGTAGAGGAAGGGg 6575

6550 gGCGCGGGTGCGCCATCTCCTTCCCc 6575

| FINGER  | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|---------|---------|---------|------------------|--------|
| Left F1 | RRHGLDR | GCG     | –                | CoDA   |
| Left F2 | LKEHLTR | GGC     | –                | CoDA   |

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F3  | RKDALHV | GTG | – | CoDA |
| Right F1 | KRERLDR | GGG | – | CoDA |
| Right F2 | QQTNLTR | GAA | – | CoDA |
| Right F3 | RRDNLNR | GAG | – | CoDA |

[ZF DNA Sequence](#)

**Blast** CGGCGCCACNNNNNNGAGGAAGGG

+ ZFN-unknown-SP-6-41  
6578 gGGCGCCACACCCACG**GCTGTGGCC**g 6603  
6578 c**CCGCGGTGT**GGGTGCCGACACCGGc 6603

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SNKDLTR | GCC     | –                | CoDA   |
| Left F2  | LKEHLTR | GGC     | –                | CoDA   |
| Left F3  | QAHGLTG | TGT     | –                | CoDA   |
| Right F1 | KRRDLDR | GCC     | –                | CoDA   |
| Right F2 | RREVLEN | GTG     | –                | CoDA   |
| Right F3 | VGASLKR | GCT     | –                | CoDA   |

[ZF DNA Sequence](#)

**Blast** GGCGCCACNNNNNNGCTGTGGCC

+ ZFN-unknown-SP-7-44  
6580 gCGCCACACCCACGGCT**GTGGCCGGG**c 6606  
6580 c**GCGGTGTGG**GTGCCGACACCGGCCCg 6606

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RAHTLRR | GCG     | –                | CoDA   |
| Left F2  | RREVLEN | GTG     | –                | CoDA   |
| Left F3  | VKHGLTR | GGT     | –                | CoDA   |
| Right F1 | KGDHLRR | GGG     | –                | CoDA   |
| Right F2 | DSSVLRR | GCC     | –                | CoDA   |
| Right F3 | RHTSLTR | GTG     | –                | CoDA   |

[ZF DNA Sequence](#)

**Blast** CGCCACACNNNNNNGTGGCCGGG

+ ZFN-unknown-SP-6-42  
6604 gGCACGCGCCTTTGGG**GTTGTTGGG**g 6629  
6604 c**CGTGCGCGG**AAACCCCAACAACCCc 6629

| FINGER | HELIX | TRIPLET | REFERENCE NUMBER | SOURCE |
|--------|-------|---------|------------------|--------|
|--------|-------|---------|------------------|--------|

|          |         |     |   |      |
|----------|---------|-----|---|------|
| Left F1  | RSRNLTL | TGC | – | CoDA |
| Left F2  | RTDTLAR | GCG | – | CoDA |
| Left F3  | ESGHLKR | GGC | – | CoDA |
| Right F1 | KSNHLHV | GGG | – | CoDA |
| Right F2 | HKSSLTR | GTT | – | CoDA |
| Right F3 | IRTSLKR | GTT | – | CoDA |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GCACGCGCCNNNNNGTTGTTGGG

#### ⊕ ZFN-unknown-SP-6-43

6679 cTGCCCCCGGGAACGACGACGGGg 6704

6679 gACGGGGGGCCCTTGCTGCTGCCCCc 6704

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DRSQLAR | GCA     | –                | CoDA   |
| Left F2  | RREHLVR | GGG     | –                | CoDA   |
| Left F3  | RNDKLVP | GGG     | –                | CoDA   |
| Right F1 | KKDHLHR | GGG     | –                | CoDA   |
| Right F2 | DRGNLTR | GAC     | –                | CoDA   |
| Right F3 | DQGNLIR | GAC     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast TGCCCCCCNNNNNGACGACGGG

#### ⊕ ZFN-unknown-SP-6-44

6978 tCTCCCCGCCGCTCAGCAGAAAGCTc 7003

6978 aGAGGGGCGGCGGAGTCGTCTTCGAg 7003

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RNTNLTR | GAG     | –                | CoDA   |
| Left F2  | RREHLVR | GGG     | –                | CoDA   |
| Left F3  | ESGHLKR | GGC     | –                | CoDA   |
| Right F1 | QRQALDR | GCT     | –                | CoDA   |
| Right F2 | QQTNLTR | GAA     | –                | CoDA   |
| Right F3 | QGNTLTR | GCA     | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CTCCCCGCCNNNNNGCAGAAAGCT

#### ⊕ ZFN-unknown-SP-7-45

7010 aCGACCCTAAACCTACCTGCGAGAACg 7036

7010 tGCTGGGATTGGATGGACGCTCTTGc 7036

| FINGER   | HELIX    | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|----------|------------|------------------|--------|
| Left F1  | KNNDLLK  | <u>TCG</u> | –                | CoDA   |
| Left F2  | RREHLVR  | <u>GGG</u> | –                | CoDA   |
| Left F3  | QQTGLNV  | <u>TTA</u> | –                | CoDA   |
| Right F1 | GHTALRN  | <u>AAC</u> | –                | CoDA   |
| Right F2 | RQDNLGR  | <u>GAG</u> | –                | CoDA   |
| Right F3 | ANRTL VH | <u>TGC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGACCCCTAANNNNNNNTGCGAGAAC

+ ZFN-unknown-SP-7-46

7129 gCGCGGCGTCTCGGTGGGACGCGGGCa 7155

7129 cGCGCCGCAGAGCCACCCTGCGCCCGt 7155

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | RLRDLPR | <u>GCG</u> | –                | CoDA   |
| Left F2  | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Left F3  | EGGNLMR | <u>GAC</u> | –                | CoDA   |
| Right F1 | VPSKLAR | <u>GGC</u> | –                | CoDA   |
| Right F2 | RTDTLAR | <u>GCG</u> | –                | CoDA   |
| Right F3 | DPSNLRR | <u>GAC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCGGCGTCNNNNNNNGACGCGGGC

+ ZFN-unknown-SP-6-45

7158 gGGCGGCGGCGGCGGGGGGGGGGGGg 7183

7158 cCCGCCGCCGCCGCCCCCCCCCCCCc 7183

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | DGSTLRR | <u>GCC</u> | –                | CoDA   |
| Left F2  | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Left F3  | ERRGLAR | <u>GCC</u> | –                | CoDA   |
| Right F1 | RKHHLGR | <u>GGG</u> | –                | CoDA   |
| Right F2 | RREHLVR | <u>GGG</u> | –                | CoDA   |
| Right F3 | RNDKLVP | <u>GGG</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GGCGGCGGCNNNNNNGGGGGGGG

+

ZFN-unknown-SP-7-47

7158 gGGCGGCGGCGGCGGGGGGGGGGGg 7184  
 7158 cCCGCCGCCGCCGCCGCCGCCGCCGCCGCCGCCc 7184

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DGSTLRR | GCC     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | ERRGLAR | GCC     | –                | CoDA   |
| Right F1 | RKHHLGR | GGG     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RNDKLVP | GGG     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast GGCGGCGGCNNNNNNGGGGGGGGG

⊞ ZFN-unknown-SP-5-33  
 7158 gGGCGGCGGCGGCGGGGGGGGGGGg 7182  
 7158 cCCGCCGCCGCCGCCGCCGCCGCCGCCGCCc 7182

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DGSTLRR | GCC     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | ERRGLAR | GCC     | –                | CoDA   |
| Right F1 | RKHHLGR | GGG     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RNDKLVP | GGG     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast GGCGGCGGCNNNNNNGGGGGGGGG

⊞ ZFN-unknown-SP-5-34  
 7161 cGGCGGCGGCGGCGGGGGGGGGGGg 7185  
 7161 gCCGCCGCCGCCGCCGCCGCCGCCGCCc 7185

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DGSTLRR | GCC     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | ERRGLAR | GCC     | –                | CoDA   |
| Right F1 | RKHHLGR | GGG     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RNDKLVP | GGG     | –                | CoDA   |

[ZF DNA Sequence](#) Bos taurus (cow) Build 3.1

Blast GGCGGCGGCNNNNNNGGGGGGGGG

⊕ ZFN-unknown-SP-7-48

7161 cGGCGGCGGCGGGGGGGGGGGGGa 7187

7161 gCCGCCGCCGCCCCCCCCCCCCCt 7187

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DGSTLRR | GCC     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | ERRGLAR | GCC     | –                | CoDA   |
| Right F1 | TSAHLAR | GGA     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RNDKLVP | GGG     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GGCGGCGGCNNNNNNGGGGGGGGA

⊕ ZFN-unknown-SP-6-46

7161 cGGCGGCGGCGGGGGGGGGGGGGa 7186

7161 gCCGCCGCCGCCCCCCCCCCCCCt 7186

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DGSTLRR | GCC     | –                | CoDA   |
| Left F2  | DSSVLRR | GCC     | –                | CoDA   |
| Left F3  | ERRGLAR | GCC     | –                | CoDA   |
| Right F1 | RKHHLGR | GGG     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | RNDKLVP | GGG     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GGCGGCGGCNNNNNNGGGGGGGG

⊕ ZFN-unknown-SP-5-35

7355 gGGCCCCCGCTCCGCCGGGGGCc 7379

7355 cCCGGGGCGCGAGGCGCCCCCGg 7379

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | SHTVLTR | GCC     | –                | CoDA   |
| Left F2  | RREHLVR | GGG     | –                | CoDA   |
| Left F3  | RTDSLPR | GCG     | –                | CoDA   |
| Right F1 | TNSKLTR | GGC     | –                | CoDA   |
| Right F2 | RREHLVR | GGG     | –                | CoDA   |
| Right F3 | EHRGLKR | GCC     | –                | CoDA   |

Bos taurus (cow) Build 3.1

[ZF DNA Sequence](#)

Blast GGCCCCGCNNNNNGCCGGGGGC

+ ZFN-unknown-SP-5-36

7401 gGACGCCTTCGCCCCGGCGCCGGGc 7425

7401 cCTGCGGAAGGCGGGCCGCGGCCc 7425

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | TGAVLTR | GTC     | —                | CoDA   |
| Left F2  | LKEHLTR | GGC     | —                | CoDA   |
| Left F3  | QTNNLTR | GAA     | —                | CoDA   |
| Right F1 | KGDHLRR | GGG     | —                | CoDA   |
| Right F2 | DSSVLRR | GCC     | —                | CoDA   |
| Right F3 | ENSKLNR | GGC     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GACGCCTTCNNNNNGGCGCCGGG

+ ZFN-unknown-SP-7-49

7495 gCGCGGCGCCGAGGGGGCGGCCGCCg 7521

7495 cCGGCCGCGGCCTCCCCCGCCGGCGGc 7521

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | RLRDLPR | GCG     | —                | CoDA   |
| Left F2  | DSSVLRR | GCC     | —                | CoDA   |
| Left F3  | ENSKLNR | GGC     | —                | CoDA   |
| Right F1 | DGSTLRR | GCC     | —                | CoDA   |
| Right F2 | DSSVLRR | GCC     | —                | CoDA   |
| Right F3 | RVDDLGR | GCG     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast CGCGGCGCCNNNNNNGCGGCCGCC

+ ZFN-unknown-SP-6-47

7510 gGGCGGCCGCCGAGGTGCGGGGCCc 7535

7510 cCCGCCGCGCGCTCCACGCCCCCGGg 7535

| FINGER   | HELIX   | TRIPLET | REFERENCE NUMBER | SOURCE |
|----------|---------|---------|------------------|--------|
| Left F1  | DGSTLRR | GCC     | —                | CoDA   |
| Left F2  | DSSVLRR | GCC     | —                | CoDA   |
| Left F3  | RVDDLGR | GCG     | —                | CoDA   |
| Right F1 | SHTVLTR | GCC     | —                | CoDA   |
| Right F2 | RREHLVR | GGG     | —                | CoDA   |
| Right F3 | RTDSLPR | GCG     | —                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GGCGGCCGCNNNNNNGCGGGGGCC

+ ZFN-unknown-SP-5-37

7510 gGGCGGCCGCCGAGGTGCGGGGGCc 7534

7510 cCCGCCGGGCGCTCCACGCCCCCGg 7534

| FINGER   | HELIX   | TRIPLET    | REFERENCE NUMBER | SOURCE |
|----------|---------|------------|------------------|--------|
| Left F1  | DGSTLRR | <u>GCC</u> | –                | CoDA   |
| Left F2  | DSSVLRR | <u>GCC</u> | –                | CoDA   |
| Left F3  | RVDDLGR | <u>GCG</u> | –                | CoDA   |
| Right F1 | TNSKLTR | <u>GGC</u> | –                | CoDA   |
| Right F2 | RREHLVR | <u>GGG</u> | –                | CoDA   |
| Right F3 | ANRTLVR | <u>TGC</u> | –                | CoDA   |

[ZF DNA Sequence](#)

Bos taurus (cow) Build 3.1

Blast GGCGGCCGCNNNNNTGCGGGGGC

+