

Supplementary Figure S4: Nucleotide sequence alignment of α -gliadin genes from the A genomes of hexaploid wheat Chinese Spring and wild emmer wheat

Ta-alpha-A4	ATGAAGACATTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Ta-alpha-A5	ATGAAGACATTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A14	ATGAAGACGTTTCTCATCCTTGCCCTCCTTACTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A20	ATGAAGGCATTTCTCATCCTTGCCCTCGTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Ta-alpha-A7	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCGCA
Ta-alpha-A9	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Ta-alpha-A8	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Ta-alpha-A10	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Ta-alpha-A6	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A15	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A21	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A24	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A13	ATGAAGACATTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A17	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCATGGGGACCACCGCCACAACCTGCA
Td-alpha-A22	-----TGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A23	ATGAAGACCTTTCTCATCCTTGTCCTCCTTGCTATTGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A18	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A11	ATGAAGACCTTTCTCATCCTTTCCCTCCTTGCTATCGTGGAGACCACCGCCACAACCTGCA
Td-alpha-A9	ATGAAGACCTTTCTCATCCTTTCCCTCCTTGCTATCGTGGAGACCACCGCCACAACCTGCA
Td-alpha-A10	ATGAAGACCTTTCTCATCCTTTCCCTCCTTGCTATCGTGGAGACCACCGCCACAACCTGCA
Td-alpha-A8	ATGAAGACCTTTCTCCTCCTTTCCCTCATTGCTATCGTGGAGACCACCACCACAACCTGCA
Td-alpha-A12	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Ta-alpha-A3	ATGAAGACCTTTCTCATCCTTTCCCTCCTTGCTATCGTGGCAACCACCGCCACAACCTGCA
Td-alpha-A4	ATGAAGACCTTTCTCATTCTTGCACTCCTTGCTATCGTGGAGACCACCGCCGCAACTGCA
Td-alpha-A5	ATGAAGACCTTTCTCATTCTGGCACTCCTTGCTATCGTGGAGACCACCGCCGCAACTGTA
Td-alpha-A2	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCAACCACCGCCACAACCTGTA
Td-alpha-A3	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCGCAACTTCA
Ta-alpha-A1	ATGAAGACTTTTCTCATCCTTGCCCTCCTTGCTATTGTGGCGACCACTGCCACAACCTGCA
Ta-alpha-A2	ATGAAGACATTTCTCATCATTTCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Td-alpha-A1	ATGAAGACACTTCTCATCCTTTCCCTCATTGCTATCGTGGCGACCACCTGCCACAACCTGCA
Td-alpha-A19	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAATTGCA
Td-alpha-A7	AT-----
Td-alpha-A6	-----
Td-alpha-A16	ATGAAGACCTTTCTCATCCTTGCCCTCCTTGCTATCGTGGCGACCACCGCCACAACCTGCA
Ta-alpha-A4	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGTCACAAGAG
Ta-alpha-A5	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A14	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A20	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Ta-alpha-A7	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Ta-alpha-A9	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAGGAG
Ta-alpha-A8	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Ta-alpha-A10	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Ta-alpha-A6	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAACATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A15	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A21	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A24	GTTAGAGTTCTAGTGCCACAATTGCAGCCATAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A13	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A17	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A22	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACACCCACAAGAG
Td-alpha-A23	GTTAGATTTCCAGTGCCACAATTGCAGCCACAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A18	GTTAGAGTTACAGTGCCACAATTGCAGCCATAAAATCCATCTCAGCAACAGCCACAAGAG

Td-alpha-A11	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A9	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A10	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A8	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTCAGCAACAGCCACAAGAG
Td-alpha-A12	TTTAGAATTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTTAGCAACAGCCACAATAG
Ta-alpha-A3	TTTAGAATTCTAGTGCCACAATTGCAGCCACAAAAATCCATCTTAGCAACAACCACAAGAG
Td-alpha-A4	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTCAGCAACAACCACAAGAG
Td-alpha-A5	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTCAGCAACAACCACAAGAG
Td-alpha-A2	GTTAGAGTTCCAGTGCCACAACCCTAGCCACAAAAATCGACCTCAGCCACAGCCACAAGGG
Td-alpha-A3	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTCAGCAACAGCCACAAGAG
Ta-alpha-A1	GTTAGAGTTCCAGTGCCACAATTGCAGCCGCAAAAAATCCATCTCTGCAGCAACCACAAGAG
Ta-alpha-A2	GTTAGAGTTCCAGTGCCACAATTGCAGCCGCAAAAAATCCATCTCTGCAACAACCACAAGAG
Td-alpha-A1	GTTAGAGTTCCAGTGCCACAATTGCAGCTGCAAAAAATCCATCTATGCAACAACCACAAGAG
Td-alpha-A19	GTTAGAGTTCCAGTGCCACAATTGCAGCCATAAAAAATCCATCTCAGCAACATCCACAAGAG
Td-alpha-A7	-----ATTGCGAGCCGCAACTACCATATTCTGT-----
Td-alpha-A6	-----CAACAACAACAACAACA
Td-alpha-A16	GTTAGAGTTCCAGTGCCACAATTGCAGCCACAAAAATCCATCTCAGCAACAGCCACAAGAG

Ta-alpha-A4	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Ta-alpha-A5	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A14	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A20	CAAGTTCCATTGGTACAACAACAACCATTTCTAGGGCAGCAACAATCATTTCCACCACAA
Ta-alpha-A7	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACATTTCCACCACAA
Ta-alpha-A9	CAAGTTCCAGTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Ta-alpha-A8	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Ta-alpha-A10	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Ta-alpha-A6	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A15	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGTAGCCACAACCATTTCCACCACAA
Td-alpha-A21	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A24	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A13	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A17	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A22	CAAGTTCCATTGGTACAACAACAACAATTTCTTGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A23	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A18	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGTAACAACCATTTCCACCACAA
Td-alpha-A11	CAAGTTCCATTGGTACAACAACAAAAATTTCTAGGGCAGCAACAACAATTTCCACCACAA
Td-alpha-A9	CAAGTTCCATTGGTATAACAACAACAAAAATTTCTAGGGCAGCAACAACAATTTCCACCACAA
Td-alpha-A10	CAAGTTCCATTGGTACAACAACAACAAAAATTTCTAGGGCAGCAACAACAATTTCCACCACAA
Td-alpha-A8	CAAGTTCCATTGGTACAACAACAATAATTTCTAGGGCAGCAACAACAATTTCCACCACAA
Td-alpha-A12	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Ta-alpha-A3	CAAGTTCCATTGGTACAACAACAGCAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A4	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGAAGCAACAACAATTTCCAACAGAA
Td-alpha-A5	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACAATTTCCAACAGAA
Td-alpha-A2	CAAGTTCCATTGGTACAACAACAACAATTTCCAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A3	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACAATTTCCACCACAA
Ta-alpha-A1	CAAGTTCCATTGGTGCAACAACAACAATTTCCAGGGCAGCAACAACAATTTCCACCACAA
Ta-alpha-A2	CAAGTTCCATTGGTGCAACAACAACAATTTCCAGGGCAGCAACAACAATTTCCACCACAA
Td-alpha-A1	CAAGTTCCATTGGTGCAACAACAACAATTTCTAGGGCAGCAACAACAATTTCCACCACAA
Td-alpha-A19	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA
Td-alpha-A7	-----AGCAGCAACCATTTGACCACAA
Td-alpha-A6	CAA-----CAACAACAACAA-----CAACAACAACAA-----
Td-alpha-A16	CAAGTTCCATTGGTACAACAACAACAATTTCTAGGGCAGCAACAACCATTTCCACCACAA

Ta-alpha-A4	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Ta-alpha-A5	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A14	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A20	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Ta-alpha-A7	CAACCATATCCACAGCTGCAACCATTTCCATCACAACAACCATATCTACAGCTGCAACCA
Ta-alpha-A9	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA

Ta-alpha-A8	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Ta-alpha-A10	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Ta-alpha-A6	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAACTACAACCA
Td-alpha-A15	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAACTGCAACCA
Td-alpha-A21	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCAT-----
Td-alpha-A24	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A13	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A17	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A22	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A23	CAACCATATCCACAGCCGCAACCATTTCCATCACAACCTACCATATCTGCAGCTGCAACCA
Td-alpha-A18	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A11	CAACCAGATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGTTGCAACCA
Td-alpha-A9	CAACCAGATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A10	CAACCAGATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTACAGCTGCAACCA
Td-alpha-A8	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGTTGCAACCA
Td-alpha-A12	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Ta-alpha-A3	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A4	CAACCATATCCGCGAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A5	CAACCATATCCGCGAGCCGCAACCATTTCCATCACAACAACCATATCTGTAGCTGCAACCA
Td-alpha-A2	CAGCCATATCCGCGAGCCGCAACCATTTCCATCACAACAACCATATCTGCAACTGCAACCA
Td-alpha-A3	CAACCATATCCGCGAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Ta-alpha-A1	CAGCCATATCCGCGAGCCGCAACCATTTCCAGCACAACAACCATATCCGCGAGCCGCAACTA
Ta-alpha-A2	CAACCATATCCGCGAGCCGCAACCATTTCCAGGACAACAACCATATCCGCGAGCCGCAACTA
Td-alpha-A1	CAGCCATATCCACAGCCGCAACCATTTCCAGCACAACAACCATATCCGCGAACCGCAACCA
Td-alpha-A19	CAACCATATCCACAGCCGCAACCATTTCCATCACAACAACCATATCTGCAGCTGCAACCA
Td-alpha-A7	CAACCATATCCACAACCGCAACCACATTATTTCGCAACCACAA-----CAACCA
Td-alpha-A6	-----
Td-alpha-A16	CAACCATATCCATAGGCGCAACCATTTCCATCACAACAATCATATCTGTAGCTGCAACCA

Ta-alpha-A4	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Ta-alpha-A5	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A14	TTTCCACAGCCGCAACTAC-----C-ATATTGCGAACCACAACCATTTCGA
Td-alpha-A20	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Ta-alpha-A7	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Ta-alpha-A9	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCAA
Ta-alpha-A8	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Ta-alpha-A10	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Ta-alpha-A6	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A15	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A21	-TTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A24	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A13	TTTCCACAGCCGCAACTAC-----C-ATATTGCGAACCACAACCATTTCGA
Td-alpha-A17	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A22	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A23	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A18	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCACAACCATTTCGA
Td-alpha-A11	TTTCCGCGAGCCGCAACTAC-----C-ATATTCTCAGCCGCAACCATTTCGA
Td-alpha-A9	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCGCAACCATTTCGA
Td-alpha-A10	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCGCAACCATTTCGA
Td-alpha-A8	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAACCGTAACCATTTCGA
Td-alpha-A12	TTTCCGCGAGCCGCAACTAC-----C-ATATTGCGAGCCGCAACCATTTCGA
Ta-alpha-A3	TTTCCGCGAGCCGCAACCAC-----C-ATATTGCGAGCCGCAACCATTTCGA
Td-alpha-A4	TTTTTCGAGCCGCAACTAC-----CCATATTTCGAGCCGCAACCATTTCGA
Td-alpha-A5	TTTTTCGAGCCGCAACTAC-----CCATATTCTCAGCCGCGAGCCATTTTCGA
Td-alpha-A2	TTTCCACAACCGCAACCATTTCCGCCACAACCTACCATATCCGCGAGCCACCACCATTTTCA
Td-alpha-A3	TTTTTCGAGCCGCAACTA-----CCATATTTCGAGCCGCAACCATTTTCGA
Ta-alpha-A1	TTTCCACAGCCGCAACCTTTTCCGCCACAACCTTCCATATCCGCGAGCCGCAACCATTTCCC
Ta-alpha-A2	TTTCCACAGCCGCAACCTTTTCCGCCACAACCTTCCATATCCGCGAGCCGCAACCATTTCCC
Td-alpha-A1	TTTCCACAGCCGCAACCTTTTCCGCCACAACCTACCATATCCGCGAGCCGCAACCATTTCCC

Td-alpha-A19	TTTCCGCAGCCGCAACTA-----CCATATTCGCAGCCACAACCATTTCGA
Td-alpha-A7	GTTTCGCACCAGCAGCAA-----CAGCAACAACAACAACAA
Td-alpha-A6	-----
Td-alpha-A16	TTTCCGCAGCTGCAACTA-----CCATATTTGCAGCCACAACCATTTCGA

Ta-alpha-A4	CCACAACAACCATATC--CACAACCGCAACCACA-----ATATTCGCAACCACAACATC
Ta-alpha-A5	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACTACAACAAC
Td-alpha-A14	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A20	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Ta-alpha-A7	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Ta-alpha-A9	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Ta-alpha-A8	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Ta-alpha-A10	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAAGAAC
Ta-alpha-A6	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A15	CCACAACAACCATATC--CACAACCACAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A21	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A24	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A13	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A17	CCACAACAACCATATC--CACAACCACAACCACA-----GTATTCGCAAGCACAACAAC
Td-alpha-A22	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A23	CCACAACAACCGTATC--CACAACCGCAACCACA-----GTAGTCGCAACCACAACAAC
Td-alpha-A18	CCACAACAACCATATC--CACAACCGCAACCACAACCACAGTATTCGCAACCACAACAAC
Td-alpha-A11	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A9	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A10	CCACAACAACCATATC--TACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A8	CCACAACAACCATATC--CACAACCGTAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A12	CCACAACAACCATATC--CACAACCGCAACCATA-----GTATTTGCAACCACAATAAC
Ta-alpha-A3	CCACAATAACCATATCTCCACAACCGCAACCACA-----GTATTCGCAACCACAATAAC
Td-alpha-A4	CCACAACAACCATATC--CACAACCGCAACGAAA-----GTATTCGCAACCACAACATC
Td-alpha-A5	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A2	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATCCGCAACCACAACAAC
Td-alpha-A3	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Ta-alpha-A1	CCACAACAACCATATC--CACAACCGCAAACACA-----GCATCTGCAACCACAACAAC
Ta-alpha-A2	CCACAACAACCATATC--CACAACCGCAAACACA-----TCATCTGCAACCACAACAAC
Td-alpha-A1	CCACAACAACCATATC--CACAACCGCAAACACA-----GCATCTGCAACCACAACAAC
Td-alpha-A19	CCACAACAACCATATC--CACAACCGCAACCACA-----GTATTCGCAACCACAACAAC
Td-alpha-A7	CAACAACAACAACA-----ACAACAACAACAACA-----ACAACAACAACAAC
Td-alpha-A6	-----CAACAACAACAAC
Td-alpha-A16	CCACAACAACCATATC--CACAACCGCAACCACAT-----TATTCGCAACCACAAGAAC

Ta-alpha-A4	CAATTTACAGCAGCAGCAGCAGCA-----
Ta-alpha-A5	CAATTTACAGCAGCAGCAGCAGCAGCA--ACAACAACAACAACAACAACAACAACAACA
Td-alpha-A14	CAATTTACAGCAGCAGCAGCAGCAGCA--ACAACAACAACAACAACAACAACAACAACA
Td-alpha-A20	CAATTTACAGCAGCAGCAGCAGCAACAACA--ACA-----
Ta-alpha-A7	CAATTTACAGCATCAACAGCAGCAGCA--GCAACAACAACAACAACAACAACA-----
Ta-alpha-A9	CAATTTACAGCAGCAGCAGCAGCAGCA--GCAGCAGCAACAACAACAACAACA-----
Ta-alpha-A8	CAATTTACAGCAGCAGC-----AGCA--GCAGCAACAACAACAACAACA-----
Ta-alpha-A10	CAATTTACAGCAGCAGC-----AACA--ACAACAACAACAACAACA-----
Ta-alpha-A6	CAATTTACAGCAGCAGC-----AGCA--GCAGCAACAACAACAACAACA-----
Td-alpha-A15	CAATTTACAGCAGCAGC-----AGCA--GCAGCAACAACAACAACAACA-----
Td-alpha-A21	CAATTTACAGCAGCAGCAGCCGAGCAGCA--GCAACAACAACAACAACAACA-----
Td-alpha-A24	CAATTTACAGCAGCAGCAGCAACAACA--ACAACAACAATAACAACA-----
Td-alpha-A13	CAATTTACAGCAGCAGCAGCAACAACA--ACAACAACAAGAACAACA-----
Td-alpha-A17	CAATTTACAGCAGCAGCAACAGCAGCA--GCAGCAACAACAACAACAACA-----
Td-alpha-A22	CAATTTACAGCAGCAGCAGCAGCAGCA--ACAACAACAACAACAACAACA-----
Td-alpha-A23	CAATTTACAGCAGCAGCAGCAGCAGCA--ACAACAACAACAACAACA-----
Td-alpha-A18	CAATTTACAGCAGCAGCAGCAACAACA--ACAACAACAACAACAACA-----
Td-alpha-A11	CAATTTTCGAGCAACAATAACAACAACA--ACA-----
Td-alpha-A9	CAATTTTCGAGCAACAATAACAACAACA--ACAACAACAACAACA-----

Td-alpha-A10	CAATTTTCGCAGCAACAATAACAACAACA--ACAA-----
Td-alpha-A8	CAATTTTCGCAGCAACAATAACAACAACA--ACAACAACAACAACA-----
Td-alpha-A12	CAATTTTCGCAGCAGCAGCAACAACAACA--ACAACAACAACAACA-----
Ta-alpha-A3	CAATTTTCGCAGCAGCAACAACAACAACA--ACAACAACAACAACAACA-----
Td-alpha-A4	CAATTTTCGCATCAGCAGCAGCAGCAACA--ACAGCAACAACAACAACAATGAC-----
Td-alpha-A5	CAATTTTCGCATTAGCAGCAGCAGCAACA--ACAGCAACAACAACAACAATGAC-----
Td-alpha-A2	CAATTTTCATAGTAACAAGCACAACAACA--ACAACAACAACAACAACAACA-----
Td-alpha-A3	CAATTTTCGCATCAGCAGCAGCAACAACA--ATAACAACAACAACAACAACAACA-----
Ta-alpha-A1	CAATTTTCGCAGCAACAAGCACAACAACA--ACAACAACAACAACAACAACAACA-----
Ta-alpha-A2	CAATTTTCGCAGCAACAAGTACAACAACA--ACAACAACAACAACAACAACAACAACA-----
Td-alpha-A1	CAATTTTCGCAGCAACAAGCACAACAACA--ACAACAACAACAACAACAACAACAACA-----
Td-alpha-A19	CAATTTTCACAGCAGCAGCAGCAGCAGCA-----
Td-alpha-A7	AA-----CAACAACAACAACAACAACA--ACAACAACAACAACAACA-----
Td-alpha-A6	AA-----CAACAACAACAACAACAACA--CAGCAACA-----
Td-alpha-A16	CAATTTTCACAGCAGCAGCAGCAACAACA--ACAACAACAACAACA-----

Ta-alpha-A4	-----ACAACAACAACAACAACAAGAACAAACA
Ta-alpha-A5	ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAAGAACAAACA
Td-alpha-A14	ACAACAACA-----ACAACAACAACAACAAGAACAAACA
Td-alpha-A20	-----ACAACAACAACAACAACAACAACAACA
Ta-alpha-A7	-----ACAACA-----
Ta-alpha-A9	-----ACAACAACAACAACAACAACCACAACA
Ta-alpha-A8	-----ACAACAACAACAACAAAAGCAA-----
Ta-alpha-A10	-----
Ta-alpha-A6	-----ACAACAACAACA-----
Td-alpha-A15	-----ACAACAACAACAACAACAACAACAACA
Td-alpha-A21	-----ACAACAACAACAACAACAAGAACAAACA
Td-alpha-A24	-----ACAACAACA-----
Td-alpha-A13	-----
Td-alpha-A17	-----ACAACAACAACAACA-----CA
Td-alpha-A22	-----ACAACAACAACAACAACAACAACAGCA
Td-alpha-A23	-----ACAACAACA-----
Td-alpha-A18	-----ACAACAACAACA-----
Td-alpha-A11	-----
Td-alpha-A9	-----
Td-alpha-A10	-----
Td-alpha-A8	-----
Td-alpha-A12	-----
Ta-alpha-A3	-----
Td-alpha-A4	-----AAAAACA
Td-alpha-A5	-----AAAAACA
Td-alpha-A2	-----AACACAACA
Td-alpha-A3	ACAACAACA-----ACAACAACAACAACAACAACAACA
Ta-alpha-A1	-----
Ta-alpha-A2	ACAACAACAACAACAACAACA-----ACAACAACAACACTACTACTACAACAACA
Td-alpha-A1	ACAACAATAACAAC-----TACAACAACA
Td-alpha-A19	-----
Td-alpha-A7	-----CAGCAACA
Td-alpha-A6	-----
Td-alpha-A16	-----

Ta-alpha-A4	AATACTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Ta-alpha-A5	AATCCTTCAACAAATTTTGCAACAACAAC---TAATTCCATGCATGGATGTT---GTATT
Td-alpha-A14	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A20	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Ta-alpha-A7	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Ta-alpha-A9	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Ta-alpha-A8	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Ta-alpha-A10	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT

Ta-alpha-A6	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A15	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A21	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A24	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A13	-ATCCTTCAACATATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A17	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A22	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A23	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A18	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A11	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A9	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A10	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A8	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A12	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Ta-alpha-A3	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A4	AATCCTTCAACAAATTTTGCAACAACATC---TCATTCCATGCATGGATGTT---GTATT
Td-alpha-A5	AATCCTTCAACAAATTTTGCAACAACAAC---TCATTCCATGCATGGATGTT---GTATT
Td-alpha-A2	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCAGGGATGTT---GTCTT
Td-alpha-A3	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Ta-alpha-A1	-ATCCTTCAACAAATTTTGCAACAACAACAACACTGATTCCATGCAGGGATGTCATCGTCTT
Ta-alpha-A2	AATCCTTCAACAAATTTTGCAACAACAACAACACTGATTCCATGCAGGGATGTCATCGTCTT
Td-alpha-A1	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCAGGGATGTCATCGTCTT
Td-alpha-A19	-----
Td-alpha-A7	AATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A6	-ATCCTTCAACAAATTTTGCAACAACAAC---TGATTCCATGCATGGATGTT---GTATT
Td-alpha-A16	-----CAACAACAAC-----

Ta-alpha-A4	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Ta-alpha-A5	ACAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A14	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A20	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Ta-alpha-A7	GCAGCAACACAACATAGCGCAAGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Ta-alpha-A9	GCAGCAACACAACATAGCGCAAGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Ta-alpha-A8	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Ta-alpha-A10	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Ta-alpha-A6	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A15	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A21	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A24	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A13	GTAGCAACACAACATAGCGCATGGAAGATCATAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A17	GCAGCAACACAACATAGCCCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A22	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A23	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A18	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A11	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A9	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A10	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A8	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Td-alpha-A12	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTACTTACCAGCT
Ta-alpha-A3	GCAGCAACACAACATAGCGCATGGAAGATCACAAGTTTTGCAACAAAAGTAGTTACCAGCT
Td-alpha-A4	GCAGCAACACAACATAGCGCATGGAAGCTCACAAGTTTTGCAACAAAAGTACTTACCAGTT
Td-alpha-A5	GCAGCAACACAACATAGCGCATGGAAGCTCACAAGTTTTGCAACAAAAGTACTTACCAGTT
Td-alpha-A2	GCAACAACACAACATAGCGCATGCAAGATCACAAGTTTTGCAACAAAAGCACTTACCAGCC
Td-alpha-A3	GCAGCAACACAACATAGCGCATGGAAGCTCACAAGTTTTGCAACAAAAGTACTTACCAGTT
Ta-alpha-A1	GCAACAACACAACATAGCGCATGAAAGCTCACAAGTATTGCAGCAAAAGTAGTTACCAAGT
Ta-alpha-A2	GCAACAACACAACATAGCGCATGAAAGCTCACAAGTATTGCAGCAAAAGTAGTTACCAAGT
Td-alpha-A1	GCAACAACACAACATAGTGCATGAAAGCTCACAAGTATTGCAGCAAAAGTAGTTACCAAGT
Td-alpha-A19	-----
Td-alpha-A7	GCAACAACACAACATAGCGCATGGAAGCTCACAAGTTTTGCAACAAAAGTACTTACCAGTT

Td-alpha-A6	GCAACAACACAACATAGCGCATGGAAGCTCACAAGTTTTGCAACAAAGTACTTACCAGTT
Td-alpha-A16	-----
Ta-alpha-A4	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Ta-alpha-A5	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A14	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A20	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTTGCAGTGCCAGGC
Ta-alpha-A7	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Ta-alpha-A9	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Ta-alpha-A8	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGTCAGGC
Ta-alpha-A10	ATTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Ta-alpha-A6	GTTACAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A15	GTTGGAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A21	GTTGCAAGAATTGTGTTGTCAACACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A24	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A13	GTTGCAAGCATTGTGTTGTCAGCACCTATGGCATATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A17	GCTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A22	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A23	GCTGCAAGAATTGTGTTGTCAACACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A18	GTTGCAAGAATTGTGTTGTCAGCACCTATGCAAGATCCCTGAGCAGTCGCAGTGCCAGGC
Td-alpha-A11	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAAGC
Td-alpha-A9	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAAGC
Td-alpha-A10	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGTAGTCGCAGTGCCAAGC
Td-alpha-A8	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGGAGTGCCAAGC
Td-alpha-A12	ATTG---GAATTGTGTTTTTCAGCACCTATGACAGATCCCTGAGCAGTCGCAGTGCCAAGC
Ta-alpha-A3	GTTGCAAGAATTGTGTTTTTCAGCACCTATGACAGATCCCTGAGCAGTCGCAGTGCCAAGC
Td-alpha-A4	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAAGC
Td-alpha-A5	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGAAAGTCGCAGTGCCAAGC
Td-alpha-A2	ATTGCAACAATTGTGTTGTCAACAGCTGTGGCAGATCCCCGAGCAGTCGCAGTGCCAAGC
Td-alpha-A3	GATGCAAGAATTGTGTTGTCAACACCTATGGCAGATCCCTGAACAGTCGCAGTGCCAAGC
Ta-alpha-A1	GTTGCAACAATTATGTTGTCAGCAGCTGCGGCAGATCCCCGAGCAGTCGCGGTGCCAAGC
Ta-alpha-A2	GTTGCAACAATTATGTTGTCAGCAGCTGCGGCTGATCCCCGAGCAGTCGCGGTGCCAAGC
Td-alpha-A1	GTTGCAACAATTATGTTGTCAGCAGCTGTGGCAGATCCCTGAGCAGTCGCGGTGTCAAGC
Td-alpha-A19	-----
Td-alpha-A7	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAAGC
Td-alpha-A6	GTTGCAAGAATTGTGTTGTCAGCACCTATGGCAGATCCCTGAGCAGTCGCAGTGCCAAGC
Td-alpha-A16	-----
Ta-alpha-A4	CATCCACAATGTTGTTTCATGCTATTATTCTGCGTCAACAACAAAAA-----CA
Ta-alpha-A5	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----CA
Td-alpha-A14	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----CA
Td-alpha-A20	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----CA
Ta-alpha-A7	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAACAACAACAACA
Ta-alpha-A9	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAACAACAACAACA
Ta-alpha-A8	CATCCAAAAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Ta-alpha-A10	CATCCAAAAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Ta-alpha-A6	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A15	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A21	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A24	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A13	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A17	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A22	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A23	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A18	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----CA
Td-alpha-A11	CATCCACAATGTTGTCCATGCTATTATTCTGCATCAACAACAAAAA-----CAACA
Td-alpha-A9	CATCCACAATGTCGTCCATGCTATTATTCTGCATCAACAACAAAAA-----CAACA
Td-alpha-A10	CATCCACAATGTTGTCCATGCTGTTATTCTGCATCAACAACAAAAA-----CAACA
Td-alpha-A8	CATCCACAATGTCGTCCATGCTATTATTCTGCATCAACAACAAAAA-----CAACA

Td-alpha-A12	CATCCACAATGTTGTCCATGCTATTATTCTGCATCAACAACAAAAAG-----CAACA
Ta-alpha-A3	CATCCACAATGTTGTCCATGCTATTATTCTGCATCAACAACAAAAACAACAACAACAACA
Td-alpha-A4	CATCCAGAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A5	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Td-alpha-A2	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAG-----
Td-alpha-A3	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----
Ta-alpha-A1	CATCAACAATGTCGTTTCATGCTATTATTCTGCATCAACAACAACAACAACA-----
Ta-alpha-A2	CATCCACAATGTCGTTTCATGCTATTATTCTACATCAACAACAACAACAACAACAACA
Td-alpha-A1	CATCCACAATGTCGTTTCATGCTATTATTCTGCATCATCATCATCAACAACAACAACA
Td-alpha-A19	-----
Td-alpha-A7	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----CA
Td-alpha-A6	CATCCACAATGTTGTTTCATGCTATTATTCTGCATCAACAACAAAAA-----CA
Td-alpha-A16	-----AACACAACAACA-----

Ta-alpha-A4	ACAAC-----AA---CAAC---CATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Ta-alpha-A5	ACAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCAACAACA
Td-alpha-A14	ACAAC-----AA---CAAC---TATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A20	AGAAC-----AA---CAACAACATATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Ta-alpha-A7	ACAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Ta-alpha-A9	ACAAC-----AA---CAACAACCATCGAGTCAGGTCTCCTTCCAACAGCCTCAGCAACA
Ta-alpha-A8	-CAAC-----AA---CAACAACCATCGAGCCAGGTGTCCTTCCAACAGCCTCTGCAACA
Ta-alpha-A10	-CAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCTGCAACA
Ta-alpha-A6	-CCAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCTGCAACA
Td-alpha-A15	-CAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCTACAACA
Td-alpha-A21	-CAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCTGCAACA
Td-alpha-A24	-----CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A13	-CAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTACCAACAGCCTCAGCAACA
Td-alpha-A17	-CAAA-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCTGCAACA
Td-alpha-A22	-CAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCTGCAACA
Td-alpha-A23	-CAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCTGCAACA
Td-alpha-A18	ACAAC-----AA---CAACAACCATCGAGCCAGGTCTCCT-----
Td-alpha-A11	ACAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A9	ACAAC-----AA---CAAC---CATCGAGCAAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A10	ACAAC-----AA---CAAC---CATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A8	ACAAC-----AA---CAACAACCATCGAGCAAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A12	ACAAC-----AA---CAACAACCATCGAGCCAGGTCTCCTTCCAATAGCCTCAGCAACA
Ta-alpha-A3	ACAAC-----AAAAACAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCCCAGCAACA
Td-alpha-A4	----C-----AACAACAACAACCATTGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A5	----C-----AACAACAACAACCATTGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A2	----C-----GACAACAACAACCATCGAGCCAAGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A3	----C-----AACAACAACAACCATCGACCATGCCTCCTTCCAACAGCCTCAACAACA
Ta-alpha-A1	-----GGACAACATCAACAGTCGAGCCAGGTCTCCTACCAGCAGCCTCAGCAACA
Ta-alpha-A2	ACAACAACAAGGACAACATCAACCGTCGAGCCAGGTCTCCTACCAGCAGCCTCAGCAACA
Td-alpha-A1	AGAA-----GAACAACAACAACCGTCGAGCCAGGTCTCCTACCAGCAGCCTCAACAACA
Td-alpha-A19	NNNNNAACAACAACAACAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A7	ACAAC-----AACAACAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A6	ACAAC-----AACAACAACAACCATCGAGCCAGGTCTCCTTCCAACAGCCTCAGCAACA
Td-alpha-A16	-----CAACAGCAGCAGCAGCA

Ta-alpha-A4	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGCCAGGGGCTC
Ta-alpha-A5	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGCCAGGGGCTC
Td-alpha-A14	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGCCAGGGGCTC
Td-alpha-A20	ATATCCATTAGGCCAGGTCTCCTTCCGGCCATCTCAGCAAAACCCACAGGCCAGGGGCTC
Ta-alpha-A7	ATATCCATTAGGCTAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGCCAGGGGCTC
Ta-alpha-A9	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGCCAGGGGCTC
Ta-alpha-A8	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGACCAGGGGCTC
Ta-alpha-A10	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGACCAGGGGCTC
Ta-alpha-A6	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGCCGGGGGCTC
Td-alpha-A15	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAACCCACAGGCCAGGGGCTC

Td-alpha-A21	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A24	ATATCCATTAGGCCAGGGCTCCTTCTGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A13	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A17	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A22	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A23	ATATCCATTAAGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A18	---TCCATTAAGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGACTC
Td-alpha-A11	ATATCCATCAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A9	ATATCCATCAGGCCAGGGCTCCTTCCGGCCATATCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A10	ATATCCATCAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A8	ATATCCATCAGGCCAGGGCTCCTTCCGGCCATATCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A12	ATATCCATCAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGTTC
Ta-alpha-A3	ATATCCATCAGGCCAGGGCTCCTTCCGGCCATCTCTGCAAAAATCCACAGGCCCAGGGGCTC
Td-alpha-A4	ATATCCATCAGGCCAGGGCTCCTTTTCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A5	ATATCCATCAGGCCAGGGCTCCTTTTCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A2	ATATCCATCAGGTCAGGGCTCCTTCCAGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A3	ATATCCATCAGGCCAGGGCTCCTTTTCGTCCATCTCAGCAAAAACCCACAGGCCCAGGGGCC
Ta-alpha-A1	ATATCCATCAGGCCAGGGCTCCTTCCAGCCATCTCAGCAAAAATCCACAGGCCCAGGGGCTT
Ta-alpha-A2	ATATCCATCAGGCCAGGGCTCCTTCCAGCCATCTCAGCAAAAATCCACAGGCCCAGGGGCTT
Td-alpha-A1	ATATCCATCAGGCCAGGGCTACTTCCAGCCATCTCAGCAAAAATCCATAGGCCCAGGGGCTT
Td-alpha-A19	ATATCCATTAGGCCAGGGCTCCTTCCGGCCATCTCAGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A7	ATATTCATCAGGATAGGGCTCCTTTTCGGCCATCTCGGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A6	ATATTCATCAGGNNAGGGCTCCTTTTCGGCCATCTCGGCAAAAACCCACAGGCCCAGGGGCTC
Td-alpha-A16	G-----CAGCAGCAGCAGCAG-----

Ta-alpha-A4	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Ta-alpha-A5	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A14	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A20	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Ta-alpha-A7	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACACT
Ta-alpha-A9	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACACT
Ta-alpha-A8	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGATGCT
Ta-alpha-A10	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Ta-alpha-A6	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A15	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A21	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A24	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACATACGCT
Td-alpha-A13	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTATAGACGCT
Td-alpha-A17	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A22	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A23	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A18	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A11	TGTCCAGTCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A9	TGTCCATCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGTAACCTAGCGCTACAGACGCT
Td-alpha-A10	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A8	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A12	TGTCCAGCCTCAACAACCTGCCC-AGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Ta-alpha-A3	GGTCCAGCCTCAACAGCTGCCC-AGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A4	TGTCCAGCCTTAAACAACCTACCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACATACGCC
Td-alpha-A5	TGTCCAGCTTAAACAACCTACCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACATACGCC
Td-alpha-A2	TGTCCAACCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACACT
Td-alpha-A3	TGTCCAGCCTCAACAACCTGCCCCA-----
Ta-alpha-A1	TGTCCAACCTCAACATCTGCCCCAAGCTCGAGGAAAATAAGTAACCTAGCGCTGCAGACGCT
Ta-alpha-A2	TGTCCAACCTCAACATCTGCCCCAAGCTCGAGGAAAATAAGTAACCTAGCGCTGCAGACGCT
Td-alpha-A1	TGTCCAACCTCAACATCTGCCCCAGCTCGAGGAAAATAAGGAACCTAGCGCTGCAGACGCT
Td-alpha-A19	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A7	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A6	TGTCCAGCCTCAACAACCTGCCCCAGTTCGAGGAAAATAAGGAACCTAGCGCTACAGACGCT
Td-alpha-A16	----CAGCAGCAGCAGCAGC-----

Ta-alpha-A4	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Ta-alpha-A5	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGTGCCATTTGG
Td-alpha-A14	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A20	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Ta-alpha-A7	ACCTGCAATTTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Ta-alpha-A9	ACCTGCAATTTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Ta-alpha-A8	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACAATCGCGCCATTTGG
Ta-alpha-A10	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Ta-alpha-A6	ACCCGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A15	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCACGCCATTTGG
Td-alpha-A21	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A24	ACCTGCAATTTGCAATGTCTACATCCCTCCATATTGC-----ACCATCACGCCATTTGG
Td-alpha-A13	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A17	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A22	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCACCATTTGG
Td-alpha-A23	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A18	ACCTGCAATTTGCAATGTCTACATCCCTCCATATTGC-----ACCATCACGCCATTTGG
Td-alpha-A11	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCACGCCATTTGG
Td-alpha-A9	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCACGCCATTTGT
Td-alpha-A10	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCATGCCATTTGG
Td-alpha-A8	ACCTGCAATGTGCAATGTCTACATCCCTTCATATTGC-----ACCATCACGCCATTTGT
Td-alpha-A12	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Ta-alpha-A3	ACCTGCAATGTGCAATCTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A4	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A5	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCCCCATTTGG
Td-alpha-A2	ACCTGGAATGTGCAATGTCTATATCCCTCCATATTGCTCGACCACCATTGCGCCATTTGG
Td-alpha-A3	-----
Ta-alpha-A1	ACCAGCAATGTGCAATGTCTACATCCCTCCATATTGCTCGACCACCATTGCGCCATTTGG
Ta-alpha-A2	ACCAGCAATGTGCAATGTCTACATCCCTCCATATTGCTCGACCACCATTGCGCCATTTGG
Td-alpha-A1	ACCAGCAATGTGCAATGTCTACATCCCTCCATATTGCTCGACCACCATTGTGCCATTTGG
Td-alpha-A19	ACCTGCAATTTGCAATGTCTACATCCCTCCATATTGC-----ACCATCACGCCATTTGG
Td-alpha-A7	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A6	ACCTGCAATGTGCAATGTCTACATCCCTCCATATTGC-----ACCATCGCGCCATTTGG
Td-alpha-A16	-----

Ta-alpha-A4	CATCTTTGGTACTAACTAA
Ta-alpha-A5	CATCTTCGGTACTAACTGA
Td-alpha-A14	CATCTTCGGTACTAACTGA
Td-alpha-A20	CATCTTCGGTACTAATTGA
Ta-alpha-A7	CATCTTCGGTACTAACTGA
Ta-alpha-A9	CATCTTCGGTACTAACTGA
Ta-alpha-A8	CATCTTCGGTACTAACTGA
Ta-alpha-A10	CATCTTCGGTACTAACTGA
Ta-alpha-A6	CATCTTCGGTACTAACTGA
Td-alpha-A15	CATCTTCGGTACTAACTGA
Td-alpha-A21	CATCTTCGGTACTAACTGA
Td-alpha-A24	CATCTTCGGTACTAACTGA
Td-alpha-A13	CATCTTCGGTACTAACTGA
Td-alpha-A17	CATCTTCGGTACTAACTGA
Td-alpha-A22	CATCTTCAGTACTAACTGA
Td-alpha-A23	CATCTTCGGTACTAACTGA
Td-alpha-A18	CATCTTCGGTACTAACTGA
Td-alpha-A11	CATCTTCGGTACTAACTGA
Td-alpha-A9	CATCTTCGGTATTAACTGA
Td-alpha-A10	CATCTTCGGTACTAACTGA
Td-alpha-A8	CATCTTCGGTATTAAACAGA
Td-alpha-A12	CATATTCGGTACTAACTGA
Ta-alpha-A3	CATCTTCGGTACTAACTGA

Td-alpha-A4	CATCTTTGGTACTAACTGA
Td-alpha-A5	CATCTTTGGTACTAACTGA
Td-alpha-A2	CATCTTCGGTACTAACTGA
Td-alpha-A3	-----
Ta-alpha-A1	CATCTTCGGTACTAACTGA
Ta-alpha-A2	CATCTTCGGTACTAACTGA
Td-alpha-A1	CATCTTCGGTACTAACTGA
Td-alpha-A19	CATCTTCGGTACTAACTGA
Td-alpha-A7	CATCTTTGGTACTAACTGA
Td-alpha-A6	CATCTTTGGTACTAACTGA
Td-alpha-A16	-----AA