

Supplementary information, Table S1 sgRNA designs, DNA targets, oligos for cloning

Name	Target	Target sequences	Forward oligo	Reverse oligo
sgTetO	Tet binding site	gCTTTTCTCTATCAC TGATAGGG	caccGCTTTTCTCTATC ACTGATA	aaacTATCAGTGATA GAGAAAAGC
sgTetO-mut	Mutant version of sgTetO	gCTTTTCTtTATCA TGgTAGGG	caccGCTTTTCTTTATC ATTGGTA	aaacTACCAATGATA AAGAAAAGC
sgNanog-1	mouse <i>Nanog</i>	GTAATGCAAAAGAA GCTGTAAGG	caccGTAATGCAAAAGA AGCTGTA	aaacTACAGCTTCTT TTGCATTAC
sgNanog-2	mouse <i>Nanog</i>	GATCTCTAGTGGGA AGTTTCAGG	caccGATCTCTAGTGGG AAGTTTC	aaacGAAACTTCCCA CTAGAGATC
sgNanog-3	mouse <i>Nanog</i>	GTCTGTAGAAAGAA TGGAAGAGG	caccGTCTGTAGAAAGA ATGGAAG	aaacCTTCCATTCTT TCTACAGAC
sgNanog-4	mouse <i>Nanog</i>	GCTCTTCACATTGG GAAACCTGG	caccGCTCTTCACATTG GGAAACC	aaacGGTTTCCCAAT GTGAAGAGC
sgNanog-5	mouse <i>Nanog</i>	GCGTTAAAAAGCCG CACTTTTGG	caccGCGTTAAAAAGCC GCACTTT	aaacAAAGTGCGGCT TTTTAACGC
sgNanog-6	mouse <i>Nanog</i>	GAGTGTTTAAATTA ATGTAGAGG	caccGAGTGTTTAAATT AATGTAG	aaacCTACATTAATT TAAACACTC

sgNanog-7	mouse <i>Nanog</i>	GAGTTTCACGTACC CGAGACTGG	caccGAGTTTCACGTAC CCGAGAC	aaacGTCTCGGGTAC GTGAAACTC
sgIL1RN-1	<i>IL1RN</i>	GCACCTCAGAGAGT ACAAGGAGG	caccGCACCTCAGAGAG TACAAGG	aaacCCTTGACTCT CTGAGGTGC
sgIL1RN-2	<i>IL1RN</i>	gGGCTGACTTGATG CCAAGCAGG	caccGGGCTGACTTGAT GCCAAGC	aaacGCTTGGCATCA AGTCAGCCC
sgIL1RN-3	<i>IL1RN</i>	gGTTTCCAGGAGGG TGA CT CAGG	caccGGTTTCCAGGAGG GTGACTC	aaacGAGTCACCCCTC CTGGAAACC
sgIL1RN-4	<i>IL1RN</i>	gGGTTCTTATCTGCG TAAGATGG	caccGGGTTCTTATCTG CGTAAGA	aaacTCTTACGCAGA TAAGAACCC
sgIL1RN-5	<i>IL1RN</i>	gATTGGGAACAAGC CAGACAAGG	caccGATTGGGAACAAG CCAGACA	aaacTGTCTGGCTTG TTCCCAATC
sgIL1RN-6	<i>IL1RN</i>	GATATGCTTTTGAG GGACCTAGG	caccGATATGCTTTTGA GGGACCT	aaacAGGTCCCTCAA AAGCATATC
sgSOX2-1	<i>SOX2</i>	GGGGAGAGGAGGAG GGGAGGCGG	caccGGGGAGAGGAGG AGGGGAGG	aaacCCTCCCCTCCTC CTCTCCCC
sgSOX2-2	<i>SOX2</i>	GAGAGAGGCCAACT	caccGAGAGAGGCCAAAC	aaacGATTCCAGTTT

		GGAATCAGG	TGGAATC	GCCTCTCTC
sgSOX2-3	<i>SOX2</i>	gCATGTGACGGGGG CTGTCAGGG	caccGCATGTGACGGGG GCTGTCA	aaacTGACAGCCCC GTCACATGC
sgSOX2-4	<i>SOX2</i>	GCTGCCGGGTTTTG CATGAAAGG	caccGCTGCCGGGTTTT GCATGAA	aaacTTCATGCAAAA CCCGGCAGC
sgSOX2-5	<i>SOX2</i>	GCCGGCCGCGCGGG GGAGGCCGG	caccGCCGGCCGCGCGG GGGAGGC	aaacGCCTCCCCCGC GCGGCCGGC
sgSOX2-6	<i>SOX2</i>	GGCAGGCGAGGAGG GGGAGGAGG	caccGGCAGGCGAGGAG GGGGAGG	aaacCCTCCCCCTCCT CGCCTGCC
sgSOX2-7	<i>SOX2</i>	GTATCCCCTCTCGCA GCAACAGG	caccGTATCCCCTCTCG CAGCAAC	aaacGTTGCTGCGAG AGGGGATAC
sgSOX2-8	<i>SOX2</i>	GCAGGGTACTTAAA TGAGGATGG	caccGCAGGGTACTTAA ATGAGGA	aaacTCCTCATTTAA GTACCCTGC
sgSOX2-9	<i>SOX2</i>	GCAGCTAAGGTGCG GGGGTGGGG	caccGCAGCTAAGGTGC GGGGGTG	aaacCACCCCCGCAC CTTAGCTGC
sgSOX2-10	<i>SOX2</i>	GGCTGTCCAACTCG TATTTCTGG	caccGGCTGTCCAACTC GTATTTTC	aaacGAAATACGAGT TGGACAGCC

sgOCT4-1	<i>OCT4</i>	GAAGGAAGGCGCCC CAAGCCGGG	caccGAAGGAAGGCGCC CCAAGCC	aaacGGCTTGGGGCG CCTTCCTTC
sgOCT4-2	<i>OCT4</i>	GGTGAAATGAGGGC TTGCGAAGG	caccGGTGAAATGAGGG CTTGCGA	aaacTCGCAAGCCCT CATTTACACC
sgOCT4-3	<i>OCT4</i>	GGCCCCGCCCCCTGG ATGGGTGG	caccGGCCCCGCCCCCT GGATGGG	aaacCCCATCCAGGG GGCGGGGCC
sgOCT4-4	<i>OCT4</i>	GGGGGGAGAACTG AGGCGAAGG	caccGGGGGGAGAACT GAGGCGA	aaacTCGCCTCAGTT TCTCCCCC
sgOCT4-5	<i>OCT4</i>	GGTGGTGGCAATGG TGTCTGTGG	caccGGTGGTGGCAATG GTGTCTG	aaacCAGACACCATT GCCACCACC
sgOCT4-6	<i>OCT4</i>	GACACAAGTGGCGC CCCTCCAGG	caccGACACAAGTGGCG CCCCTCC	aaacGGAGGGGCGCC AGTTGTGTC

Last three bases are PAM (5'-NGG-3') motif. Lowercase letters in the target sequences indicate mismatch (first g to allow efficient U6 transcription) or as mutant control (other changes; as in sgTetO-mut). Lowercase letters in the oligo sequences indicate overhang compatible to the BbsI-digested vectors.