

To make construction

pEFrtTAIB

Primer name  
BlaSF1spe  
BlaSpAR2not  
tTA-claF1  
tTA-pstR1  
tTAD95NR1  
tTAE71KF1  
tTAE71KR1  
tTAL101SG102DF1

Sequence 5' to 3'  
TAGCATACTAGTATGGCCAAGCCTTTGTCTCAAG  
GCTAGTGCGGCCGCGACGGTATACAGACATG  
TAGACGATCGATATGTCTAGATTAGATAAAAAGTAA  
TACGATCTGCAGCTACCCACCGTACTCGTCAATTC  
TGCTCCATTGCGATGACTTAGTAAAGCACATCTAA  
CTCACTTTTGCCTTTAAAAGGGGAAAGCTGGCAA  
TATGGTGCCTATCTAACATCTCAATGGCTAAGGCG  
AAAGTACATTCAGATACACGGCCTACAGAAAAACA

Test fragments

Primer name  
Xi0-notF  
Xi949-notR  
Xist6119Rnot  
Xist6079notF  
Xist7snotR  
XistLex7notF  
EGFP-BamF1  
EGFPstop-BamR1

Sequence 5' to 3'  
ATCGATGCGGCCGCTGTTTGCTCGTTTTCCCGTGGATG  
AGCTAGTGCGGCCGCGGTGTCCTAATTCTTGGCG  
AGCTAGTGCGGCCGCTACCTTGAAGGACCATTGACCG  
TCGATGCGGCCGCGATTGAAACGATTCCAATACGG  
GCTAGTGCGGCCGCGTAGTTCCCCGCTCTTGGGAAG  
GTAGCGGCCGCGTATGTCATAAGACACAAAACCTG  
ATCGATGGATCCATGGTGAGCAAGGGCGAGGAG  
AGCTAGTGGATCCTTACTTGTACAGCTCGTCCATG

Col1a1 locus targeting

Primer name  
colLAF1  
colLAR1  
PGKinfF1  
PGKinfR1

Sequence 5' to 3'  
GGGAACAAAAGCTGGCAGAGGCCGAAGGCAACAG  
ATCCACTAGTTCTAGACTACAGGAGTTTGGATAA  
ATCGATAAGCTTGATATCGAATTCTACCGG  
GTAGTCTAGAACTAGCAGCTGGTTCTTTCCGCCTC

Oligo for gRNA

Primer name  
XPR\_Xist(-20)  
XPR\_Xist(0.9k)  
CRISPR\_Col1a1

Sequence 5' to 3'  
GATCAGTTAAAGGCGTGCAA  
GGAGTGCTCGTATTAGTGTG  
CCCATTAGCCGGTATGTTATTAC

RT-PCR/qRT-PCR

Primer name  
Xist1F  
Xist101R  
XistEx4F1  
XistEx4R1  
XistEx7F21  
XistEx7R20  
GapdF  
GapdR  
GapdintR1  
ActbF  
ActbR

Sequence 5' to 3'  
TGTTTGCTCGTTTTCCCGTGGGA  
CATAAGGCTTGGTGGTAGGG  
ATTGTGGGCTTGCTGCTTTG  
GGTTCAGGAAAGCGTCTCA  
GGCATAGTCTCTACAAAATTTTCATT  
CTCCAATTTCTGGGCTCAAG  
ATGGCCTTCCGTGTTCCCTAC  
TGTGAGGGAGATGCTCAGTG  
CCCCAAAATGACTATCCTTGTC  
ACAGCTTCTTTGCAGCTCCT  
ATTCCCACCATCACACCCTG

Genotyping for  $\Delta$ Xist

Primer name  
Xist(-540)F  
XistFqR1

Sequence 5' to 3'  
ATGGAGTCACCAGGTTCCCA  
ACAAAGATTGGGCTGTGCGAG

Genotyping for targeting

Primer name  
ColarmF1  
col-typeR

Sequence 5' to 3'  
GCCGATGTCGCTATCCAGCTGACCTTC  
AGGACTACTGTCCTTTATCACGGG

Synthetic Oligo for 950-nt mut 5' to 3'

5'-CCTTTTGGTTGATACTTGTGTGTGTATGGTGGACTTACCTTTCTTTCATTGTTTAT  
ATATTCTTGCgCATCGGaGCCACGGATACCTGTGTGTCCTCCCCGCCATTCCATG  
CgCAACGGaGTTTTGGATACTTACCTGCCTTTTCATTCATTTTTTTTTCTAAACTTG  
CgCATCTGaGCTGTGGATACCTGCTTTTATTCTTTTTTTCTTCTCCTTAGCgCATCG  
GaGCCATGGATACCTGCgagagacgcgGTAAAAAAAAAAAAACCTTTCTCGGTgCATC  
GGaACCTCGGATACCTGCGTTTAGTCTTTTTTTCCCATGCgCAACGGaGCCTCGGA  
TACCTGCTGTTACTTTTTCTTTTGCgCATCGGaGCTGTGGATACCTGCTTAA  
ATTTTTTTTTTACGGCgCAACGGaGCGCTTGGTGGATGGAAATATGGTTTTGTGA  
GTTATTGCACTACCTGGA-3'