



\* Site not unique in pEF-1/pENTR A and B

Frame A: 696-6  
 Frame B: 708-1  
 Frame C: 709-1  
 Lac Z: 710-1

Recommended E.coli strain for propagation: TOP10F'

# pEF/ENTR[A]MCS

EF-1 $\alpha$  forward priming site  
 GTTTGGATCT TGGTTCATTC TCAAGCCTCA GACAGTGGTT CAAAGTTTTT TTCTTCCATT TCAGGTGTCG TGAGGAATTA  
 3' end of hEF-1 $\alpha$  Intron 1  
 5' end of hEF-1 $\alpha$  Exon 2  
 T7 promoter/priming site  
 GCTTGGTACT AATACGACTC ACTATAGGGA GACCCAAGCT GGCTAGTTAA GCT TGG TAC CGA GCT CGG ATC CAC  
 Asp718 I Kpn I Bam HI Spe I  
 Trp Tyr Arg Ala Arg Ile His  
 Bst XI\* EcoR I EcoR V BstX I\* Not I Xba I\*  
 TAG TCC AGT GTG GTG GAA TTC TGC AGA TAT CCA GCA CAG TGG CGG CCG CTC GAG TCT AGA GGG CCC  
 \*\*\* Ser Ser Val Val Glu Phe Cys Arg Tyr Pro Ala Gln Trp Arg Pro Leu Glu Ser Arg Gly Pro  
 Bst BI V5 epitope Polyhistidine region  
 TTC GAA GGT AAG CCT ATC CCT AAC CCT CTC CTC GGT CTC GAT TCT ACG CGT ACC GGT CAT CAT CAC  
 Phe Glu Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp Ser Thr Arg Thr Gly His His His  
 Xba I\* att L2  
 CAT CAC CAT TGA GTTTATCTAG ACCCAGCTTT CTTGTACAA AGTTGGCATT TAAGAAAGCA  
 His His His \*\*\*  
 TTGCTTATCA ATTTGTTGCA ACGAACAGGT CACTATCAGTCAAAATAAAA TCATTATTTG CCATCCAGCT  
 pENTR reverse primer binding site  
 GCAGCTCTGG CCCGTGTCTC AAAATCTCTGATGTTACATT

# pEF/ENTR[B] MCS

EF-1 $\alpha$  forward priming site  
 3' end of hEF-1 $\alpha$  Intron 1  
 5' end of hEF-1 $\alpha$  Exon 2  
 T7 promoter/priming site  
 Asp718 I Kpn I Bam HI Spe I  
 Bst XI\* EcoR I EcoR V BstX I\* Not I Xba I\*  
 Bst BI V5 epitope Polyhistidine region  
 Xba I\* att L2  
 pENTR reverse primer binding site

GTTTGGATCT TGGTTCATTC TCAAGCCTCA GACAGTGGTT CAAAGTTTTT TTCTTCATT TCAGGTGTCG TGAGGAATTA  
 GCTTGGTACT AATACGACTC ACTATAGGGA GACCCAAGCT GGCTAGTTAA G CTT GGT ACC GAG CTC GGA TCC ACT  
 AGT CCA GTG TGG TGG AAT TCT GCA GAT ATC CAG CAC AGT GGC GGC CGC TCG AGT CTA GAG GGC CCG  
 Ser Pro Val Trp Trp Asn Ser Ala Asp Ile Gln His Ser Gly Gly Arg Ser Ser Leu Glu Gly Pro  
 CAT CAC CAT TGA GTTTATCTAG ACCCAGCTTT CTTGTACAA AGTTGGCATT TAAGAAAGCA  
 His His His \*\*\*  
 TTGCTTATCA ATTTGTTGCA ACGAACAGGT CACTATCAGT CAAAATAAAA TCATTATTTG CCATCCAGCT  
 GCAGCTCTGG CCCGTGTCTC AAAATCTCTGATGTTACATT

# pEF/ENTR[C]MCS

EF-1 $\alpha$  forward priming site  
 3' end of hEF-1 $\alpha$  Intron 1  
 5' end of hEF-1 $\alpha$  Exon 2  
 T7 promoter/priming site  
 Asp718 I Kpn I Bam HI Spe I  
 Bst XI\* EcoR I EcoR V BstX I\* Not I Bst EII Bst BI  
 V5 epitope Polyhistidine region  
 Xba I\* att L2  
 pENTR reverse primer binding site

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GTTTGGATCT TGGTTCATTC TCAAGCCTCA GACAGTGGTT CAAAGTTTTT TTCTTCCATT TCAGGTGTCG TGAGGAATTA
GCTTGGTACT AATACGACTC ACTATAGGGA GACCCAAGCT GGCTAGTTAA GC TTG GTA CCG AGC TCG GAT CCA CTA
GTC CAG TGT GGT GGA ATT CTG CAG ATA TCC AGC ACA GTG GCG GCC GCT CGA GGT CAC CCA TTC GAA
Val Gln Cys Gly Gly Ile Leu Gln Ile Ser Ser Thr Val Ala Ala Ala Arg Gly His Pro Phe Glu
GGT AAG CCT ATC CCT AAC CCT CTC CTC GGT CTC GAT TCT ACG CGT ACC GGT CAT CAT CAC CAT CAC CAT TGA
Gly Lys Pro Ile Pro Asn Pro Leu Leu Gly Leu Asp Ser Thr Arg Thr Gly His His His His His His ***
GTTTATCTAG ACCCAGCTTT CTTGTACAA AGTTGGCATT TAAGAAAGCA
TTGCTTATCA ATTTGTTGCA ACGAACAGGT CACTATCAGTCAAAATAAAA TCATTATTG CCATCCAGCT
GCAGCTCTGG CCCGTGTCTC AAAATCTCTGATGTTACATT
  
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