

Primer	Sequence
ET-C-Bce-F	TAAGAAGGAGATATACCATGAATATGAAAGAAATTAGTAAAGTAGTGG
ET-C-Bce-R	TGGTGGTGGTGAAGAAGAACCTCTAACTCCTCAATCTTTCCA
ET-C-Bli-F	TAAGAAGGAGATATACCATGAATATGGAAGATGCCGCAAG
ET-C-Bli-R	TGGTGGTGGTGAAGAAGAACCTTCCACCTCTCTGATCCTGC
ET-C-Bme-F	TAAGAAGGAGATATACCATGGATATTAGTAAAATTTACAGCTCAATT
ET-C-Bme-R	TGGTGGTGGTGAAGAAGAACACGTTGATGTACTCTTGCA
ET-C-Ppe-F	TAAGAAGGAGATATACCATGAACCTTCAAGATATTGCCAAAA
ET-C-Ppe-R	TGGTGGTGGTGAAGAAGAACCTGCTTCTCCAATTTTCATAAGGT
ET-C-Cbu-F	TAAGAAGGAGATATACCATGAATATAGATATAGCACAAAAGGTAGTA
ET-C-Cbu-R	TGGTGGTGGTGAAGAAGAACCTTTAATTTTACTTCTTTTGTAGCAAATCTTCTT
ET-C-Ehu-F	TAAGAAGGAGATATACCATGCAGCCTGACCTGCTCGATCTAC
ET-C-Ehu-R	TGGTGGTGGTGAAGAAGAACCTGCCTGCTCCTCCAGCGTATAAAGC
ET-C-Sau-F	TAAGAAGGAGATATACCATGAATTATCTAAATAAAATACGTATTGAAAACC
ET-C-Sau-R	TGGTGGTGGTGAAGAAGAACCTTCCACCTCTTGAATACGAA
ET-C-Bst-F	TAAGAAGGAGATATACCATGGCCGATTGGCGTGAATGGG
ET-C-Bst-R	TGGTGGTGGTGAAGAAGAACCCCGTTGTTTCGACCTGTCCGTCAC
ET-C-Sma-F	TAAGAAGGAGATATACCATGATCGCTCGACCTGATGC
ET-C-Sma-R	TGGTGGTGGTGAAGAAGAACCCAGATCCTCTCCGCGCAG
ET-C-Sty-F	TAAGAAGGAGATATACCATGCAGCCTGACCTGCA
ET-C-Sty-R	TGGTGGTGGTGAAGAAGAACCATTCGTTGCATTGGCCGC
PET-Ipk-F	TAAGAAGGAGATATACCATGATTATTCTGAAACTTGGTGGTAGC
PET-C-Ipk-R	TGGTGGTGGTGAAGAAGAACCGTGTTTACCTGTAATACGTGTACCG
KLD-IPK-R	TTAGTGTTTACCTGTAATACGTGTA
RS-Stythim-F	TAATAAGGAGATATACCATGCAGCCTGACCTGCACTG
RBS-Stythim-R	CATTTTAGCTCTCCTTAGATATCTTAATTCGTTGCATTGGCCGC
IDI-IPK-RBS-F	TGAGATATCTAAGGAGAGCTAAAATGATTATTCTGAAACTTGGTGGTAGC
RS-IPK-IDI-R	GTTTCTTTACCAGACTCGAGTTAATTGTGCTGCGCGAAAG
RS-Bsthim-F	TAATAAGGAGATATACCATGGATGCACAATCAGCAGC
RBS-Bsthim-R	CATTTTAGCTCTCCTTAGATATCTCATGAGACAGTCACCCTTTCTA
RS-Smathim-F	TAATAAGGAGATATACCATGATCGCTCGACCTGATGC
RBS-Smathim-R	CATTTTAGCTCTCCTTAGATATCTCACAGATCCTCTCCGCG
RS-Nudix-F	TAATAAGGAGATATACCATGGCGATGACAGTTGGTTA
RS-Nudix-R	GTTTCTTTACCAGACTCGAGTCAAGAATGAGTAGTGAAAATATTGAAACT
RS-Nudix-CDS-R	TTAGCTCTCCTTAGATATCTCAAGAATGAGTAGTGAAAATATTGAAACT
RS-Nudix-CDS-F	GATATCTAAGGAGAGCTAAAATGACTACGACATTGAGCA
RS-Nudix2-F	TAATAAGGAGATATACCATGGCGATGACAGTTGGTTTAGG
RS-Nudix2-R	GTCATTTTAGCTCTCCTTAGATATCTCAAGAATGAGTAGTGAAAATATTGAAACTACCA
RSCDS-F	CTTGAGATATCTAAGGAGAGCTAAAATGACTACGACATTGAGCA
RS-ADH3-F	TAATAAGGAGATATACCATGTCCTTAAACACTCCGGATGTTA
RS-ADH3-R	CTCATTTTAGCTCTCCTTAGATATCTCAATCAAAGTTGATAAGAATCTTGACGC
RSALDH3-F	GATTGAGATATCTAAGGAGAGCTAAAATGAGTTCAGGAGCTAATGG
RS-ALDH3-F	TAATAAGGAGATATACCATGAGTTCAGGAGCTAATGGAA
RS-ALDH3-R	GTTTCTTTACCAGACTCGAGCTAGAGCCATGGAGAATTGTATATG
KLD-ALDH-F	CGAAAAAGTTCTTTTCGTACATTGAGCTTGG
KLD-ALDH-R	TATTGTTGTTTGTATTCTGAGGACCATGACGAG
KLD-ALDH-F2	CAACAGGAGACCGTTTTGATGCC
KLD-ALDH-R2	CCCAATTTTTCACCGTTGCTTCCAG
RSALDH-F	ATTAAGATATCTAAGGAGAGCTAAAATGAGTTCAGGAGCTAATGG
RS-ADH-F	TAATAAGGAGATATACCATGAGCCTGAACACCCC
RS-ADH-ALDH-R	CTCATTTTAGCTCTCCTTAGATATCTTAATCAAAGTTAATCAGGATCTTCACGC
ET-His-ADH-F	ATCATCACAGCAGCGCATGAGCCTGAACACCCC
ET-ADH-R	TTGTTAGCAGCCGATCTCATTAATCAAAGTTAATCAGGATCTTCACGC
ET-ADH-F	TAAGAAGGAGATATACCATGAGCCTGAACACCCC
ET-ADH-His-R	TGGTGGTGGTGAAGAAGAACCATCAAAGTTAATCAGGATCTTCACGC
RS-CDS-F	ACTACGACATTGAGCAG
RSALDH4-F	GATTGAGATATCTAAGGAGAGC
RSAA-F	AGTAAGAATTCTAAGGAGATAAAAATATGTCCTTAAACACTCCG

RS-NC-F TAATAAGGAGATATACCATGGCGATGACAGTTGGTTTA
RS-NC-R GACATATTTTATCTCCTTAGAATTCTTACTTATGTCCCTTATACATCTTTTCCAG
KLD-NCAA-F CCTGTTATAATGGTCCTCAAATTCAGACC
KLD-NCAA-R GCCAAATATTTCTTCTTTGCTATGGT
Duet-DAGK-F TAATAAGGAGATATACCATGCCTATGGACTTAAGAGATAATAAG
Duet-DAGK-IPK-R TTTAGCTCTCCTTAGATATCTTAATGAAAAGCAAAAACCAAATTTTTG
Duet-DAGKop-F TAATAAGGAGATATACCATGCCGATGGATCTGCG
Duet-DAGKop-IPK-R TTTAGCTCTCCTTAGATATCTTAGTGGAACAGCAGGAACC
Duet-Bce-F TAATAAGGAGATATACCATGAATATGAAAGAAATTAGTAAAGTAGTGGAT
Duet-Bce-IPK-R TTTAGCTCTCCTTAGATATCTTACTCTAACTCCTCAATCTTTCCATA
Duet-Bli-F TAATAAGGAGATATACCATGAATATGGAAGATGCCGCAAG
Duet-Bli-IPK-R TTTAGCTCTCCTTAGATATCTTATTCCACCTCTCTGATCCTGC
Duet-Cbu-F TAATAAGGAGATATACCATGAATATAGATATAGCACAAAAGGTAGTA
Duet-Cbu-IPK-R TTTAGCTCTCCTTAGATATCTTATTTAATTTTACTTCTTTTTAGCAAATCTTCT
Duet-Ehu-F TAATAAGGAGATATACCATGCAGCCTGACCTGCTC
Duet-Ehu-IPK-R TTTAGCTCTCCTTAGATATCTCATGCCTGCTCCTCCAG
Duet-Gst-F TAATAAGGAGATATACCATGGCCGATTGGCGTGAAT
Duet-Gst-IPK-R TTTAGCTCTCCTTAGATATCTTACCGTTGTTTCGACCTGTCC
Duet-Ec-F TAATAAGGAGATATACCATGCAAGTCGACCTGCTG
Duet-Ec-IPK-R TTTAGCTCTCCTTAGATATCTTATGCCTGCACCTCCTG
Duet-PhoN-F TAATAAGGAGATATACCATGTCTATTCCACCAGGTAACGA
Duet-PhoN-IPK-R TTTAGCTCTCCTTAGATATCTTACTTCTTCTGGTTATTAGCAAATTCGCTC
Duet-LicA-F TAATAAGGAGATATACCATGGAAAAGATCATCAAAGAGAAGATT
Duet-LicA-IPK-R TTTAGCTCTCCTTAGATATCTTATTTTTCATCACTACCACCATAGC
Duet-hcKa2-F TAATAAGGAGATATACCATGGGTCAACAGCCACCG
Duet-hcKa2-IPK-R TTTAGCTCTCCTTAGATATCTTACACGCCAGTTACGTTTCTGA
Duet-ScCK-F TAATAAGGAGATATACCATGGTACAAGAATCACGTCC
Duet-ScCK-IPK-R TTTAGCTCTCCTTAGATATCTTACAAATAACTAGTATCGAGGAACTTG
IK-IPK-F GATATCTAAGGAGAGCTAAAATGATTAT
RS-C-Thim-F TAATAAGGAGATATACCATGCAAGTCGACCTGC
RS-C-Thim-R TGATGGTGATGGGAAGAACCCTGCCTGCACCTCCT
RS-C-BSThim-F TAATAAGGAGATATACCATGGATGCACAATCAGC
RS-C-BSThim-R TGATGGTGATGGGAAGAACCCTGAGACAGTCACCCTTTC
ET-BSThim-F TAAGAAGGAGATATACCATGGATGCACAATCAGCAGCAAAT
ET-C-BSThim-R TGGTGGTGGTGAGAAGAACCCTGAGACAGTCACCCTTTCTATAGT
RS-N-LicA-F CACAGCTCAGGAATGGAAAAGATCATCAAAGAGAA
RS-N-LicA-R GTTTCTTTACCAGACTCGAGTTATTTTTCATCACTACCACCATA
RS-C-LicA-F TAATAAGGAGATATACCATGGAAAAGATCATCAAAGAGAA
RS-C-LicA-R TGATGGTGATGGGAAGAACCCTTTTTCATCACTACCACCATAG
RS-N-hcKa2-F CACAGCTCAGGAATGGGTCAACAGCCA
RS-N-hcKa2-R GTTTCTTTACCAGACTCGAGTTACACGCCAGTTTAC
RS-C-hcKa2-F TAATAAGGAGATATACCATGGGTCAACAGCCA
RS-C-hcKa2-R TGATGGTGATGGGAAGAACCACGCCAGTTTACG
RS-N-ScCK-F CACAGCTCAGGAATGGTACAAGAATCACGTC
RS-N-ScCK-R GTTTCTTTACCAGACTCGAGTTACAAATAACTAGTATCGAGGAACT
RS-C-ScCK-F TAATAAGGAGATATACCATGGTACAAGAATCACGTC
RS-C-ScCK-R TGATGGTGATGGGAAGAACCCTAAATAACTAGTATCGAGGAACT
RS-N-PhoN-F CACAGCTCAGGAATGTCTATTCCACCAGGTAA
RS-N-PhoN-R GTTTCTTTACCAGACTCGAGTTACTTCTTCTGGTTATTAGCAA
RS-C-PhoN-F TAATAAGGAGATATACCATGTCTATTCCACCAGGTAA
RS-C-PhoN-R TGATGGTGATGGGAAGAACCCTTCTTCTGGTTATTAGCAAATTC
CDS-Nudix-F GATATCTAAGGAGAGCTAAAATGGCGATGACAGTTG
CDS-Nudix-R TTTAGCTCTCCTTAGATATCTTACTTATGTCCCTTATACATCTTTTC
RS-CDS-F2 TAATAAGGAGATATACCATGACTACGACATTGAGCAG
RS-CDS-R2 GTTTCTTTACCAGACTCGAGTTACTTATGTCCCTTATACATCTTTTCCAG
RSAAM-ADHm-F AGCTCAGGAATGTCCTTAAACACTCCGG
RSAAM-R GCTGCTGCCCATGGTATATCTCCTTATTAAGTTAAACA
RSAAM-SUMO-F GATATACCATGGGCAGCAGCATGTCGGACTCAGAA

RSAAM-SUMO-R TTTAAGGACATTCTGAGCTGGATCCACCAATCTGTTCTC
 RSAAM-GST-F GATATACCATGGGCAGCAGCATGTCCCCTATACTAGGTTATTGGA
 RSAAM-GST-R TTTAAGGACATTCTGAGCTTTTTGGAGGATGGTCGCC
 RSAAM-TRX-F GATATACCATGGGCAGCAGCAGGATAAAAATTATTCACCTGACTGACGAC
 RSAAM-TRX-R TTTAAGGACATTCTGAGCTGGCCAGGTTAGCGTCGAG
 Duet-TFactor-F TAATAAGGAGATATAACCATGCAAGTTTCAGTTGAAACCACTCA
 Duet-TFactor-R GTTTCTTTACCAGACTCGAGTTACGCCTGCTGGTTCATCA
 Duet-GroESL-F TAATAAGGAGATATAACCATGAATATTCGTCCATTGCATGATCGCG
 Duet-GroESL-R GTTTCTTTACCAGACTCGAGTTACATCATGCCGCCATGC
 Duet-DnaKJ-F TAATAAGGAGATATAACCATGGGTAAAATAATTGGTATCGACCTGGGT
 Duet-DnaKJ-R GTTTCTTTACCAGACTCGAGTTAGCGGGTCAGGTCGTCGA
 Duet-clpB-F TAATAAGGAGATATAACCATGCGTCTGGATCGTCTTACTAATAAATTC
 Duet-clpB-R GTTTCTTTACCAGACTCGAGTTACTGGACGGCGACAATCC
 RSAAS-ADHs-F AGCTCAGGAATGAGCCTGAACACCC
 RSAAS-SUMO-R TTCAGGCTCATTCTGAGCTGGATCCACCAATCTGTTCTC
 RSAAS-GST-R TTCAGGCTCATTCTGAGCTTTTTGGAGGATGGTCGCC
 RSAAS-TRX-R TTCAGGCTCATTCTGAGCTGGCCAGGTTAGCGTCGAG
 (PT)4P-CDS-F CCAACACCTACTCCCACACCAACGCCTATGACTACGACATTGAGCAG
 Nudix-R AGAATGAGTAGTGAAAATATTGAAACTACC
 (PT)4P-Nudix-F CCAACACCTACTCCCACACCAACGCCTATGGCGATGACAGTTGGT
 CDS-R CTTATGTCCCTTATACATCTTTTCCAGA
 (GSG)3-CDS-F GGTAGCGGTGGTAGCGGTGGTAGCGGTATGACTACGACATTGAGCAG
 (GSG)3-Nudix-F GGTAGCGGTGGTAGCGGTGGTAGCGGTATGGCGATGACAGTTGGT
 28a-NHis-CDS-F ATCATCACAGCAGCGGCATGACTACGACATTGAGCAG
 28a-CDS-R TTGTTAGCAGCCGGATCTCATTACTTATGTCCCTTATACATCTTTTCC
 28a-Nudix-F TAAGAAGGAGATATAACCATGGCGATGACAGTTGG
 28a-Nudix-CHis-R TGGTGGTGGTGAGAAGAACCAGAATGAGTAGTGAAAATATTGAAACTACC
 28a-NHis-IPK-F ATCATCACAGCAGCGGCATGATTATTCTGAACTTGGTGGTA
 28a-IPK-R TTGTTAGCAGCCGGATCTCATTAGTGTTCACCTGTAATACGTGTAC
 28a-NHis-AtIPK-F ATCATCACAGCAGCGGCATGGAGCTGAATATTTCCGA
 28a-AtIPK-R TTGTTAGCAGCCGGATCTCATTACTTTGAGAATCTGATGATAGTACC
 SUMO-CDS-R GTCGTAGTCATTCTGAGCTGGATCCAC
 GST-CDS-R GTCGTAGTCATTCTGAGCTTTTTGGAGGATG
 TAG-CDS-F AGCTCAGGAATGACTACGACATTGAGCA
 Duet-Nudix-R GTTTCTTTACCAGACTCGAGTCAAGAATGAGTAGTGAAAATATTGAAA
 Nudix-RBS-R TTTAGCTCTCCTTAGATATCTCAAG
 RBS-SUMO-F GATATCTAAGGAGAGCTAAAATGGGCAGCAGCATGT
 Duet-CDS-R GTTTCTTTACCAGACTCGAGTTACTTATGTCCCTTATACATCTTTTCCAG
 TAG-SMA-F AGCTCAGGAATGATCGCTCGACCTG
 SUMO-SMA-R CGAGCGATCATTCTGAGCTGGATCCA
 IPK-65-F ATGATTATTCTGAACTTGGTGGTAGC
 SMA-66-KR9-R TTTACGTTTCTTTTTCTGGCGTTTCTTCAGATCCTCTCCGCGC
 SMA-66-PT-R AGGCGTTGGTGTGGGAGTAGGTGTTGGCAGATCCTCTCCGCGC
 28a-Nudix-R TTGTTAGCAGCCGGATCTCATCAAGAATGAGTAGTGAAAATATTGAAACT
 28a-BliPK-F ATCATCACAGCAGCGGCATGAGAAAGACTAAAATAGTTTGTACAA
 28a-BliPK-R TTGTTAGCAGCCGGATCTCATTAAAGCACGCTTGCAC
 28a-ZmoPK-F ATCATCACAGCAGCGGCATGACTGAAGGACTTTTCCACG
 28a-ZmoPK-R TTGTTAGCAGCCGGATCTCATTAGGCTTCGATAACATCAACAATGT
 28a-MsmPK-F ATCATCACAGCAGCGGCATGAGCAGACGCGAAAGATCG
 28a-MsmPK-R TTGTTAGCAGCCGGATCTCACTAGACGTCGTCCTCTCCGA
 28a-NHis-ALDH-F ATCATCACAGCAGCGGCATGAGTTCAGGAGCTAATGGAA
 28a-ALDH-R TTGTTAGCAGCCGGATCTCACTAGAGCCATGGAGAATTGTATATG
 Duet-ATFKI-F TAATAAGGAGATATAACCATGGTGTATGTTTCCGGAAAA
 Sumo-ATFKI-F GATCCAGCTCAGGAATGGTGTATGTTTCCGGAAAA
 ATFKI-IPK-R TTTAGCTCTCCTTAGATATCTTAGAAGAGTAAGAATCCGGC
 IK-IPK-F GATATCTAAGGAGAGCTAAAATGATTAT
 Sumo-ATFKI-R CACCATTCTGAGCTGGATC
 pET28aHis-R CATGCCGCTGCTGTGATGATGATG

pET28a-F	TGAGATCCGGCTGCTAACAAAG
pet28a-R	CATGGTATATCTCCTTCTTAAAGTTAAAC
pet28aChis-F	GGTTCTTCTCACCACCACCACCACC
Duet-XhoI-F	CTCGAGTCTGGTAAAGAAACCG
Duet-XhoI-F2	CTCGAGTCTGGTAAAGAAAC
Duet-1stATG-R	CATGGTATATCTCCTTATTAAAGTTAAAC
Duet-1stATG-F	GTTTAACTTAAATAAGGAGATATACCATG