

Gene (Family)	Vector	Restriction digestion of vector	Primers 5' to 3' Downstream and upstream (top and bottom)
SSO2938 (MFS)	pTTQ18	<i>NdeI, PstI</i>	CCGGAATTCGCATATGGTCTCAGAGAAACTAAG AAA <u>ATGCAG</u> CATATTCCTGCTTCAGTATTTCTTCTCCTT
	pET52b(+)	<i>XmaI, SacI</i>	TCCC <u>CCCGG</u> GATGGTCTCAGAGAAACTAAGGCTATAAT TAT <u>GAGCT</u> CATATTCCTGCTTCAGTATTTCTT
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGGTCTCAGAGAAACTAAGGCTATAAT CG <u>GGATCC</u> ATATTCCTGCTTCAGTATTTCTT
SSO2528 (MFS)	pTTQ18	<i>NdeI, PstI</i>	GGGAATTCATATGAAAGATGAACTAAAGTTTCCATAGC CCA <u>ATGCAT</u> CCCTTACTCTTTCCTGCCCTTCAAATA
	pET52b(+)	<i>XmaI, SacI</i>	TCCC <u>CCCGG</u> GATGAAAGATGAACTAAAGTTTCCATAGC TAT <u>GAGCT</u> CCCTTACTCTTTCCTGCCCTTCAAAT
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGAAAGATGAACTAAAGTTTCC CG <u>GGATCC</u> CCCTTACTCTTTCCTGCCCTTCAAATA
SSO2042 (NCS1)	pTTQ18	<i>EcoRI, PstI</i>	CCG <u>CAATTG</u> GCATATGTCAGAACAAGAAATAAACCCAC AAA <u>ATGCAG</u> CAGGTTCCATTTTCACTTCTC
	pET52b(+)	<i>XmaI, SacI</i>	TCCC <u>CCCGG</u> GATGTCAGAACAAGAAATAAACCCAC TAT <u>GAGCT</u> CAGGTTCCATTTTCACTTCTTTTT
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGTCAGAACAAGAAATAAACCCACGTTAAT CG <u>GGATCC</u> CAGGTTCCATTTTCACTTCTTTTT
SSO1665 (NCS1)	pTTQ18	<i>EcoRI, PstI</i>	CCG <u>CAATTG</u> GCATATGACTGGAAAGGAGAAATTAGCTCAAATAACG CCA <u>ATGCAT</u> CTCTTAATATCCCCCTTCATAGTTAAACG
	pET52b(+)	<i>XmaI, SacI</i>	TCCC <u>CCCGG</u> GATGACTGGAAAGGAGGAAATTAGCTCAAATA TATGAGCTCTCTTAATATCCCCCTTCATAGTTAAACG
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGACTGGAAAGGAGGAAATTAGCTCAAATA CG <u>GGATCC</u> CTCTTAATATCCCCCTTCATAGTTAAA
Saci2039 (NCS1)	pTTQ18	<i>EcoRI, PstI</i>	CCGGAATTCGCATATGGAAGGAAAAAAGTAAAGA AAA <u>ATGCAG</u> CTGATAATCTCCACCTTTATAAGTGTA
	pET52b(+)	<i>XmaI, SacI</i>	TCCC <u>CCCGG</u> GATGGAAGGAAAAAAGTAAAGAGG TAT <u>GAGCT</u> TGATAATCTCCACCTTTATAAG
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGGAAGGAAAAAAGTAAAG CG <u>GGATCC</u> TGATAATCTCCACCTTTATAAGTGTA
MA1518 (NSS)	pTTQ18	<i>EcoRI, PstI</i>	CCG <u>CAATTG</u> GCATATGGTGGCGAGAGAAGTCTGGAACA CCA <u>ATGCAT</u> CCCTTACCTCCCTGTTGATAAAAAGGC
	pET52b(+)	<i>BamHI, SacI</i>	CG <u>GGATCC</u> GATGGTGGCGAGAGAAGTCTGGAACACCAGAGT TAT <u>GAGCT</u> CTTACCTCCCTGTTGATAAAAAGGCCTAAGGAT
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGGTGGCGAGAGAAGTCTGGAACA CG <u>GGATCC</u> CTTACCTCCCTGTTGATAAAAAG
MJ1319 (NSS)	pTTQ18	<i>EcoRI, PstI</i>	CCGGAATTCGCATATGAGTTATATGGAAGAGAAAAGCTG AAA <u>ATGCAG</u> CCCAACCTTTAATCGTTTTTCAT
	pET52b(+)	<i>XmaI, NotI</i>	TCCC <u>CCCGG</u> GATGAGTTATATGGAAGAGAAAAGCTG AAGAAAAAAG <u>CGGCCGCC</u> CAACCTTTAATCGTTTTTCAT
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGAGTTATATGGAAGAGAAAAGCTG CG <u>GGATCC</u> CCCAACCTTTAATCGTTTTTCATT
Mevan1511 (NCS2)	pTTQ18	<i>EcoRI, PstI</i>	CCGGAATTCGCATATGAAAAGAATAGTATTGGGTTTTCAA CCA <u>ATGCAT</u> CTTTTTTAATATCTGATCCA
	pET52b(+)	<i>XmaI, SacI</i>	TCCC <u>CCCGG</u> GATGAAAAGAATAGTATTGGGTTTTCAAC TAT <u>GAGCT</u> CTTTTTTAATATCTGATCCATCAATATTGC
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGAAAAGAATAGTATTGGGTT CG <u>GGATCC</u> CCCTCAACACCTGCTTAACACAATA
MMP0681 (NCS2)	pTTQ18	<i>EcoRI, PstI</i>	CCGGAATTCGCATATGAAAAGAATAGCACTAGGTTTCCA CCA <u>ATGCAT</u> CTTTTTTAACAACCTGGTCCATTAATATTGCG
	pET52b(+)	<i>XmaI, SacI</i>	TCCC <u>CCCGG</u> GATGAAAAGAATAGCACTAGGTTTCCA TAT <u>GAGCT</u> CTTTTTTAACAACCTGGTCCATT
	pWarf(-)	<i>XhoI, BamHI</i>	CCG <u>CTCGAG</u> ATGAAAAGAATAGCACTAGGTTTCC CG <u>GGATCC</u> TTTTTTTAACAACCTGGTCCATT
Hbor39700 (MFS)	pTTQ18	<i>NdeI, PstI</i>	GGGAATTCATATGTCAACCTCTAATATACAGGACATTCT CCA <u>ATGCAT</u> CGTCGTCGGCGGTGCGATATTCTT
	pET52b(+)	<i>XmaI, SacI</i>	TCCC <u>CCCGG</u> GATGTCAACCTCTAATATACAGGACATTCT TAT <u>GAGCT</u> CGTCGTCGGCGGTGCGATGCGATATTCT
	pWarf(-)	<i>EcoRI, BamHI</i>	CCG <u>CAATTG</u> CCATGTCAACCTCTAATATACAGGACATTCT CG <u>GGATCC</u> GTGTCGTCGGCGGTGCGATGCGATATTCT

AF2014 (MFS)	pTTQ18	<i>NdeI, PstI</i>	GGGAATTCATATGGGTGAATTCTCCAAGTTGAGAAAC AAAA <u>CTGCAG</u> CAAACTCCTCCAGCTCTCTCCCTT
	pET52b(+)	<i>XmaI, SacI</i>	TCCCCCGGGATGGGTGAATTCTCCAAGTTGAGAAACTA TAT <u>GAGCTC</u> AAACTCCTCCAGCTCTCTCCCTTCGTTTC
	pWarf(-)	<i>XhoI, BamHI</i>	CCGCTCGAGATGGGTGAATTCTCCAAGTTGAGAAACTA CGC <u>GATCC</u> AAACTCCTCCAGCTCTCTCCCTTCGTTTC
Ta0252 (MFS)	pTTQ18	<i>EcoRI, PstI</i>	CCGGAATTCGCATATGGAAAATGGAGTCAGATATCCGAT AAAA <u>CTGCAG</u> CTTTTCGGGTCTGCTGGAACGCTCTCCTT
	pET52b(+)	<i>XmaI, SacI</i>	TCCCCCGGGATGGAAAATGGAGTCAGATATCCGAT TAT <u>GAGCTC</u> TTTCGGGTCTGCTGGAACGCTCTCCTT
	pET52b(+)	<i>XhoI, BamHI</i>	CCGCTCGAGATGGAAAATGGAGTCAGATATCCG CGC <u>GATCC</u> TTTCGGGTCTGCTGGAACGCTCTCCTTCTT
Msed1117 (MFS)	pTTQ18	<i>EcoRI, PstI</i>	CCGGAATTCGCATATGGTTATCAAGAGTAATCCAGACAAGG AAAA <u>CTGCAG</u> CTCTAAATCTATCAGTTATTTCTTCTA
	pET52b(+)	<i>XmaI, SacI</i>	TCCCCCGGGATGGTTATCAAGAGTAATCCAGACAA TAT <u>GAGCTC</u> TCTAAATCTATCAGTTATTTCT
	pWarf(-)	<i>XhoI, BamHI</i>	CCGCTCGAGATGGTTATCAAGAGTAATCCAGACAA CGC <u>GATCC</u> TCTAAATCTATCAGTTATTTCTT
pNG7043 (MFS)	pTTQ18	<i>EcoRI, HindIII</i>	CCGGAATTCGCATATGTCCACAGCGACCATACGTAAAC CCC <u>AAGCTT</u> CTATTAATGGTGATGGTGATGGTGGCTGCCACGGTCAGCCAGTGAGATGTTCTGCG
	pET52b(+)	<i>BamHI, SacI</i>	CGC <u>GATCC</u> GATGTCCACAGCGACCATACGTAAAC TAT <u>GAGCTC</u> GTTCAGCCAGTGAGATGTTCTGCG
	pWarf(-)	<i>EcoRI, BamHI</i>	CCGGAATTCGCATATGTCCACAGCGACCATACGTAA CGC <u>GATCC</u> GTTCAGCCAGTGAGATGTTCTGCCGAGGTC
Saci1848 (MFS)	pTTQ18	<i>EcoRI, PstI</i>	CCGGAATTCGCATATGAGGAACAATACCACTAAC AAAA <u>CTGCAG</u> CTATTTTCTCTAAATTCACATTAT
	pET52b(+)	<i>XmaI, SacI</i>	TCCCCCGGGATGAGGAACAATACCACTAACG TAT <u>GAGCTC</u> TATTTTCTCTAAATTCACATTATTAGT
	pWarf(-)	<i>XhoI, BamHI</i>	CCGCTCGAGATGAGGAACAATACCACTAACGTGAT CGC <u>GATCC</u> TATTTTCTCTAAATTCACATTATTAGT

---