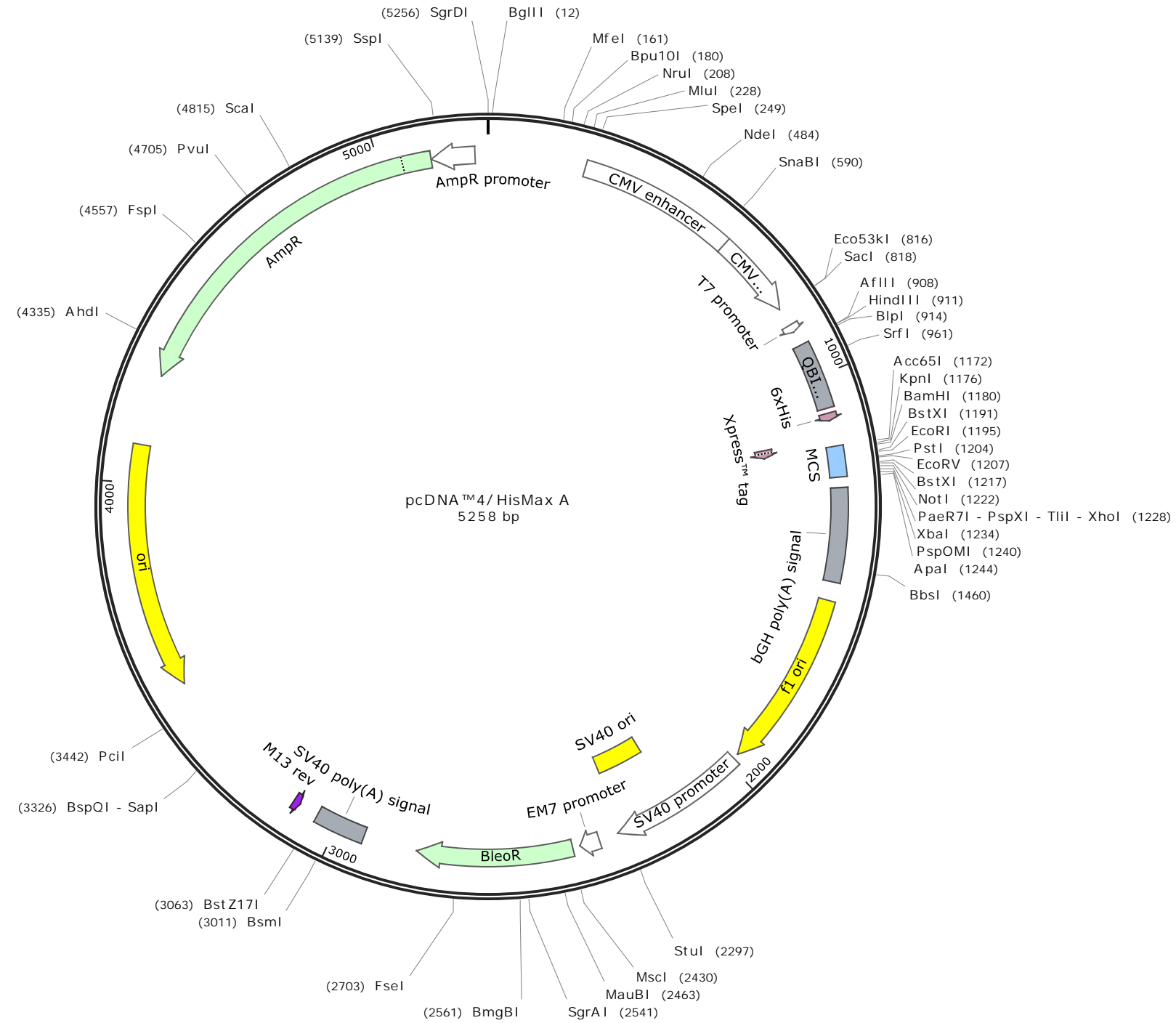
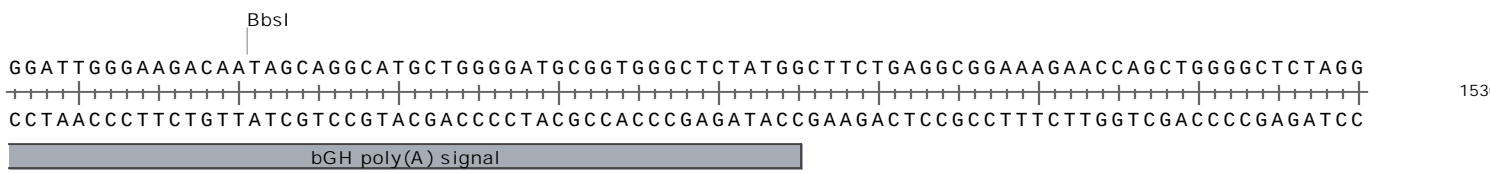
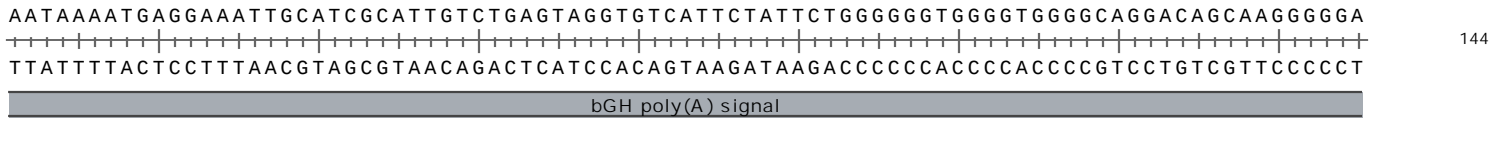
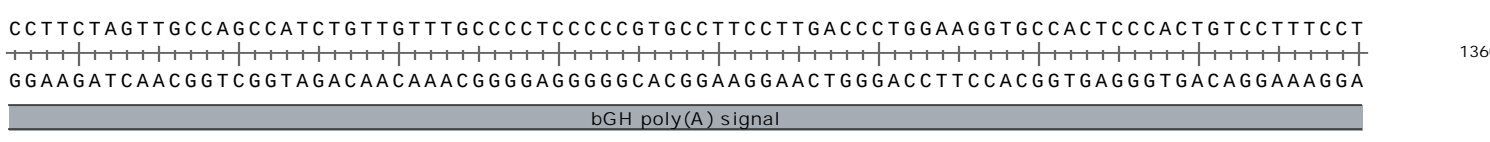
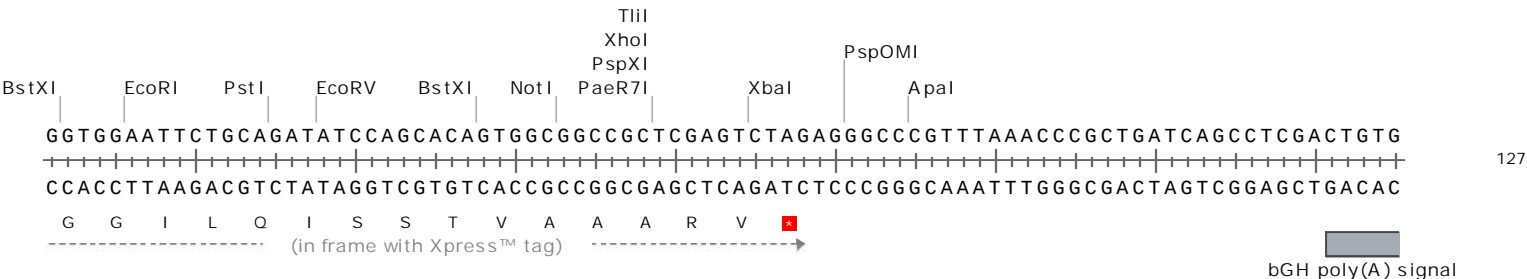
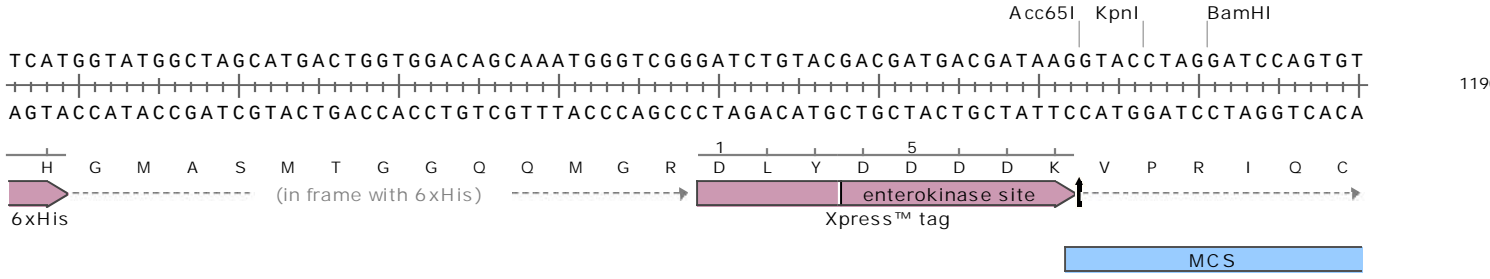
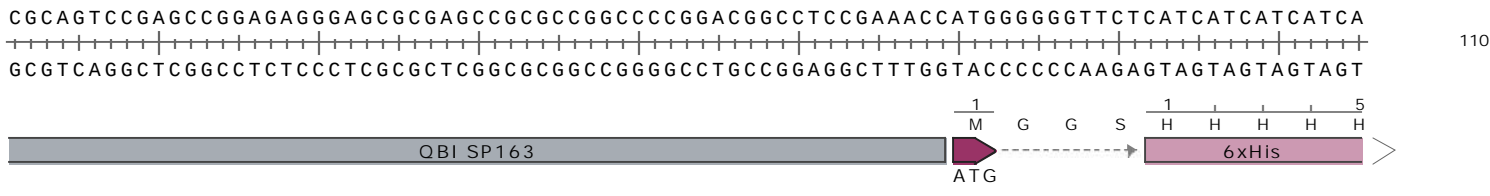
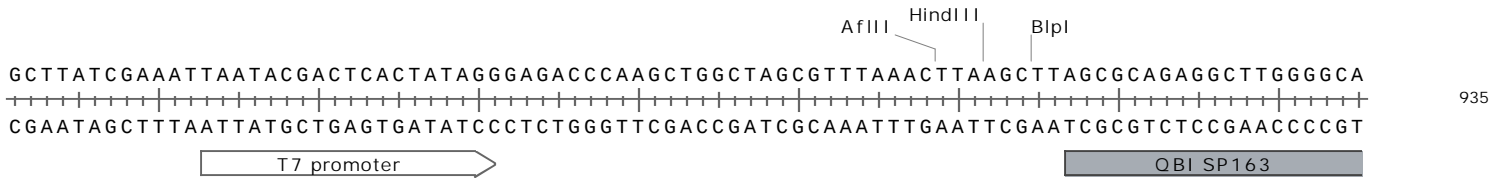


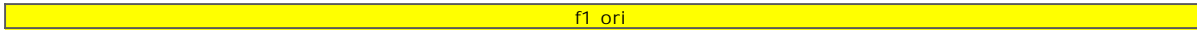
Mammalian cell vector for high-level expression of proteins with a cleavable N-terminal 6xHis tag.



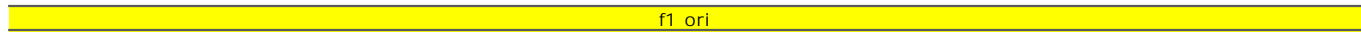




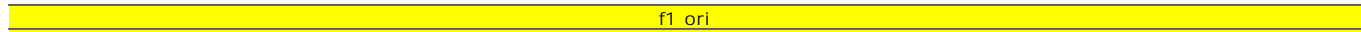
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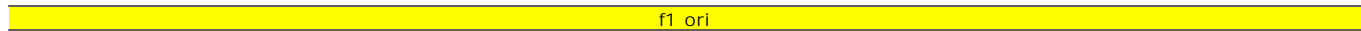
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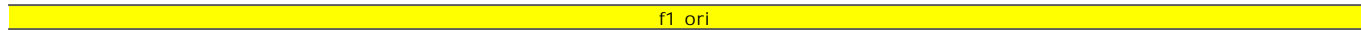
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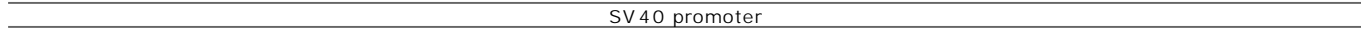
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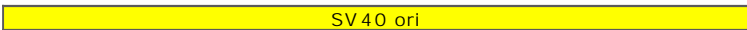
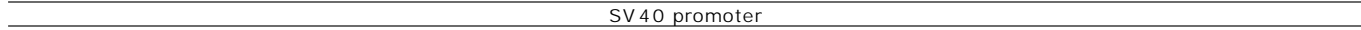
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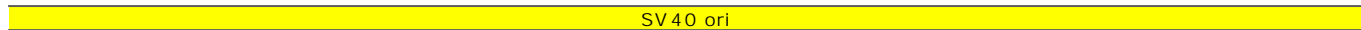
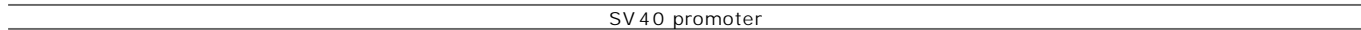
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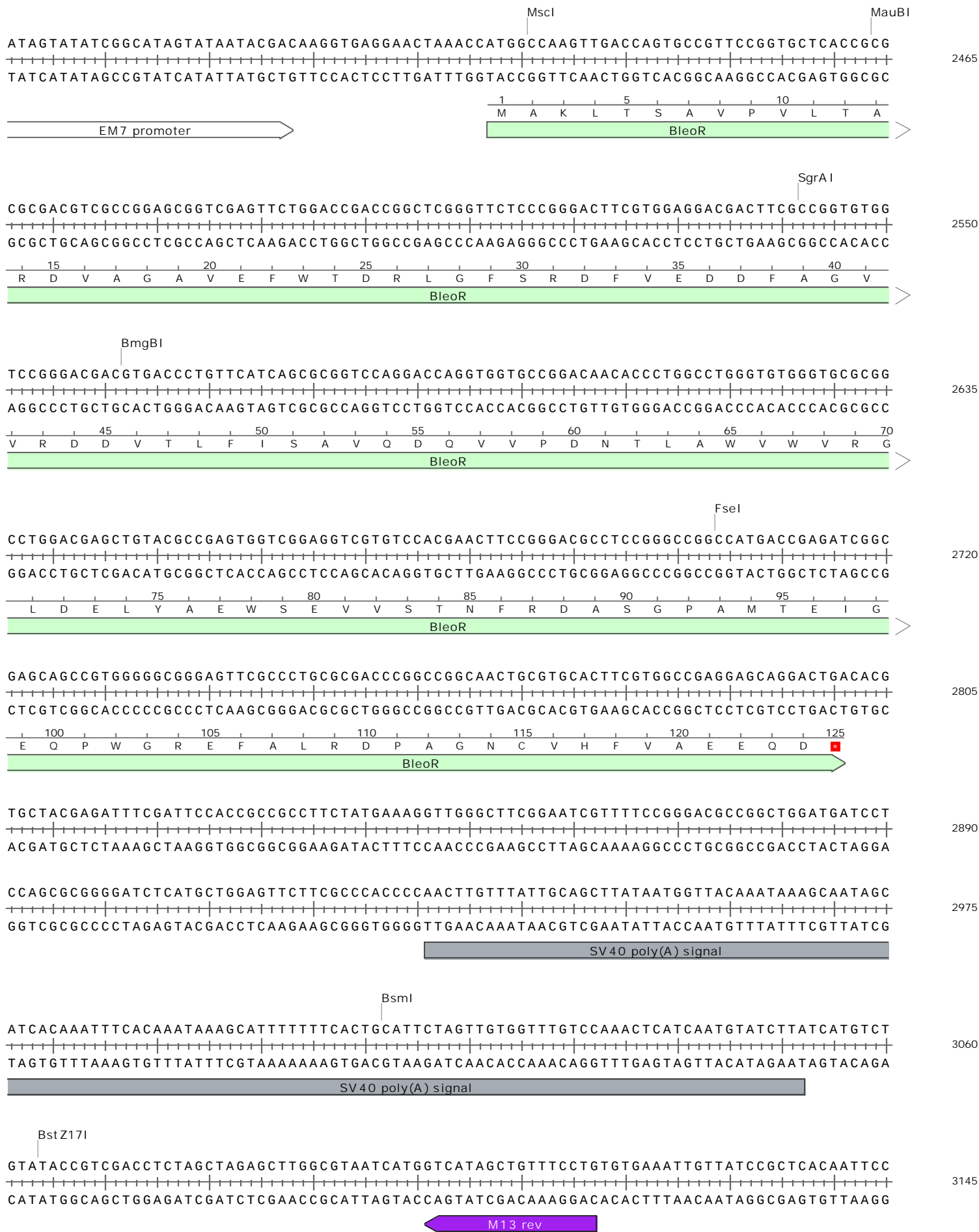
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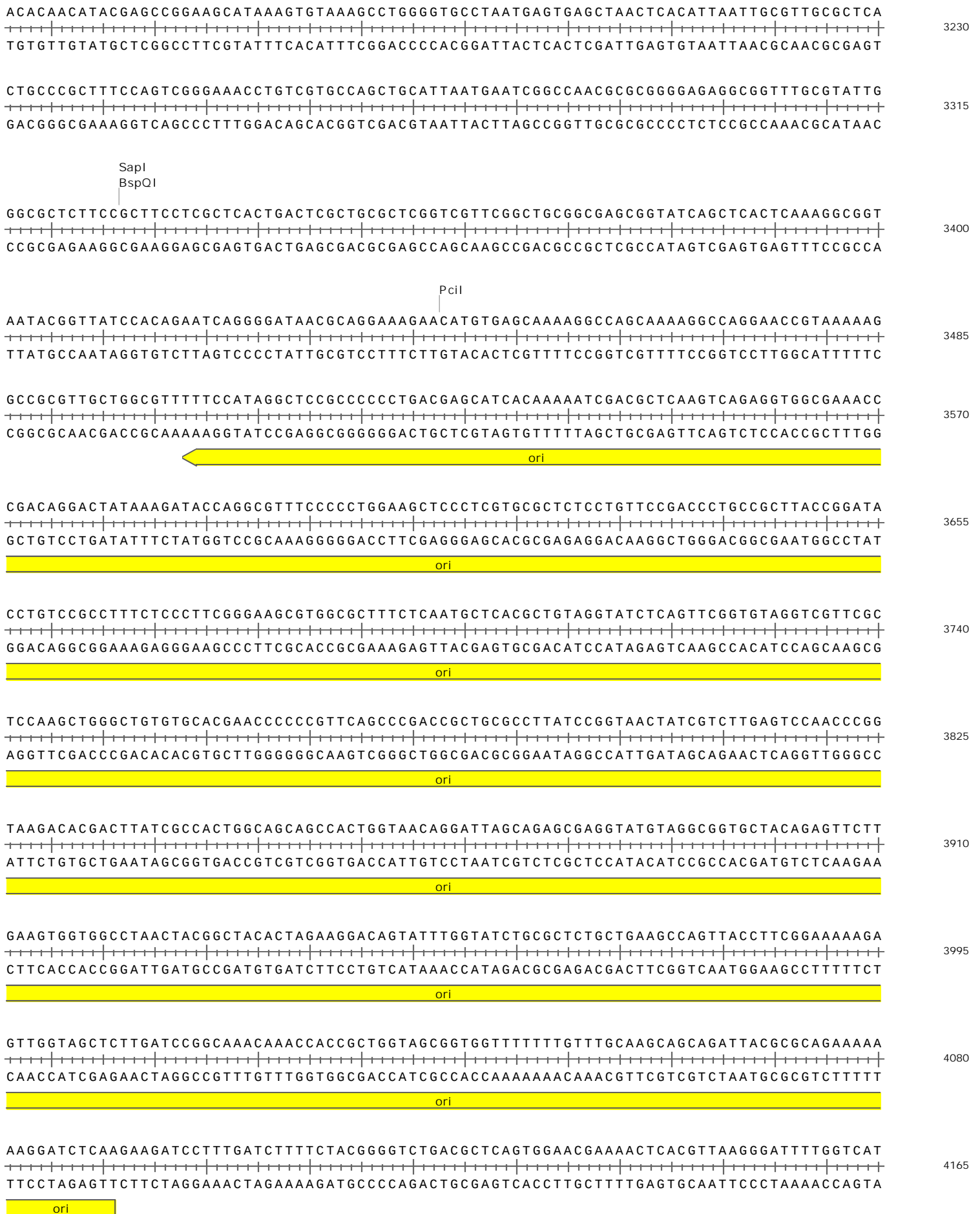


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SV40 ori





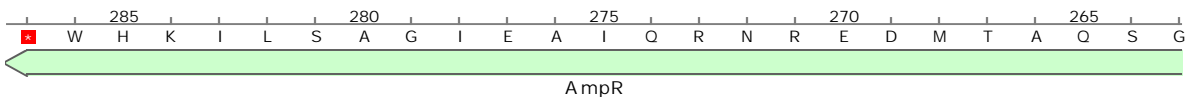
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4250

AhdI

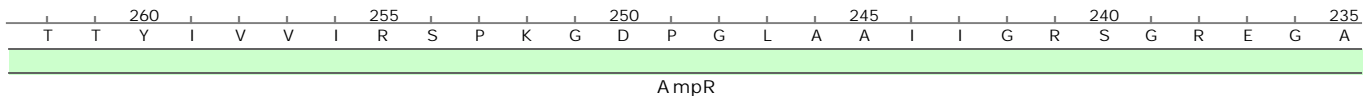
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4335



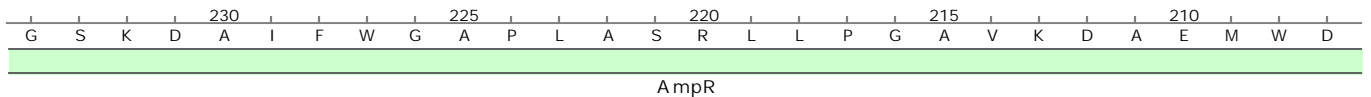
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4420



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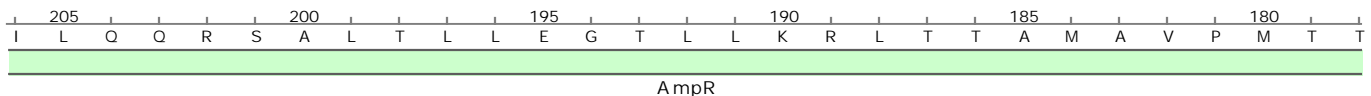
4505



FspI

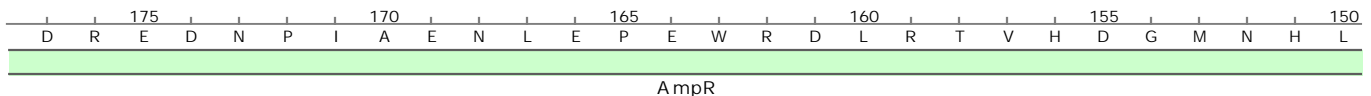
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4590



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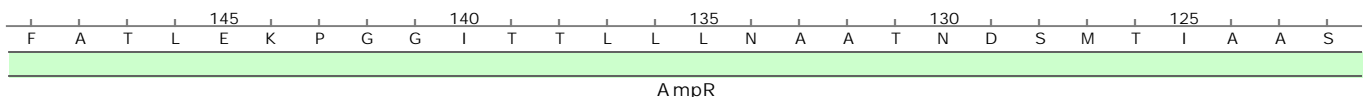
4675



PvuI

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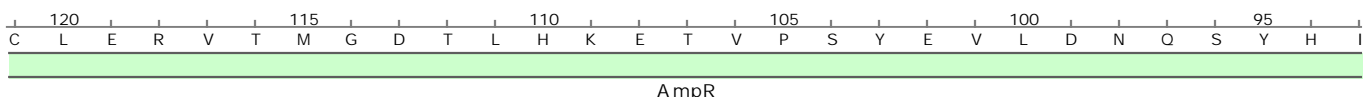
4760



ScaI

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4845



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4930

R R G L Q E Q G A D I R S L V A G C L L V K F T S M M P

AmpR

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5015

F R E E P R F S E L I K G S N L D L E I Y G V R A G L Q

AmpR

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5100

D E A D K V K V L T E P H A F V P L C F A A F F P I L A V

AmpR

signal sequence

SspI

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5185

R F H Q I S M

signal sequence

AmpR

AmpR promoter




SgrDI













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5258

AmpR promoter

Enzymes	Sites	
Acc65I	1	1172
AflII	1	908
AhdI	1	4335
ApaI	1	1244
BamHI	1	1180
BbsI	1	1460
BglII	1	12
BlnI	1	914
BmgBI	1	2561
Bpu10I	1	180
BsmI	1	3011
BspQI	1	3326
BstXI	2	1191 1217
BstZ17I	1	3063
Eco53kI	1	816
EcoRI	1	1195
EcoRV	1	1207
FseI	1	2703
FspI	1	4557
HindIII	1	911
KpnI	1	1176
MauBI	1	2463
MfeI	1	161
MluI	1	228
MscI	1	2430
NdeI	1	484
NotI	1	1222
NruI	1	208
PaeR7I	1	1228
PciI	1	3442
PspOMI	1	1240
PspXI	1	1228
PstI	1	1204
PvuI	1	4705
SacI	1	818
SapI	1	3326
ScaI	1	4815
SgrAI	1	2541
SgrDI	1	5256
SnaBI	1	590
SpeI	1	249
SrfI	1	961
SspI	1	5139
StuI	1	2297
TliI	1	1228
XbaI	1	1234
XhoI	1	1228

Feature	Location	Size (bp)			Type
✓ CMV enhancer /note = human cytomegalovirus immediate early enhancer	235 .. 614	380			enhancer
✓ CMV promoter /note = human cytomegalovirus (CMV) immediate early promoter	615 .. 818	204			promoter
✓ T7 promoter /note = promoter for bacteriophage T7 RNA polymerase	863 .. 881	19			promoter
✓ QBI SP163 /note = strong translational enhancer derived from the 5' UTR of the mouse VEGF gene	917 .. 1079	163			misc_feature
✓ ATG /product = start codon /translation = M 1 amino acid = 149.2 Da	1080 .. 1082	3			CDS
✓ 6xHis /product = 6xHis affinity tag /translation = HHHHHH 6 amino acids = 840.9 Da	1092 .. 1109	18			CDS
✓ Xpress™ tag ▶ 2 segments /product = Xpress™ epitope tag, including an enterokinase recognition and cleavage site /translation = DLY,DDDDK 8 amino acids = 998.0 Da	1149 .. 1172	24			CDS
✓ MCS /note = multiple cloning site	1172 .. 1245	74			misc_feature
✓ bGH poly(A) signal /note = bovine growth hormone polyadenylation signal	1271 .. 1495	225			polyA_signal
✓ f1 ori /direction = RIGHT /note = f1 bacteriophage origin of replication; arrow indicates direction of (+) strand synthesis	1541 .. 1969	429			rep_origin
✓ SV40 promoter /note = SV40 enhancer and early promoter	1983 .. 2313	331			promoter
✓ SV40 ori /note = SV40 origin of replication	2164 .. 2299	136			rep_origin
✓ EM7 promoter /note = synthetic bacterial promoter	2361 .. 2408	48			promoter

Feature	Location	Size (bp)			Type
✓ BleoR	2427 .. 2801	375			CDS
/gene	= Sh ble from Streptoalloteichus hindustanus				
/product	= antibiotic-binding protein				
/note	= confers resistance to bleomycin, phleomycin, and Zeocin™				
/translation	= MAKLTSAVPVLTARDVAGAVEFWTDRLGFSRDFVEDDFAGVVRDDVTLFISAVQDQVVPDNTLAWVWVRGLDELYAEWSEVVST NFRDASGPAMTEIGEQPWGREFALRDPAGNCVHFVAEEQD*				
	124 amino acids = 13.8 kDa				
✓ SV40 poly(A) signal	2931 .. 3052	122			polyA_signal
/note	= SV40 polyadenylation signal				
✓ M13 rev	3101 .. 3117	17			primer_bind
/note	= common sequencing primer, one of multiple similar variants				
✓ ori	3503 .. 4091	589			rep_origin
/direction	= LEFT				
/note	= high-copy-number CoIE1/pMB1/pBR322/pUC origin of replication				
✓ AmpR	4262 .. 5122	861			CDS
▶ 2 segments					
/gene	= bla				
/product	= -lactamase				
/note	= confers resistance to ampicillin, carbenicillin, and related antibiotics				
/translation	= MSIQHFRVALIPFFAAFCPLPVFA,HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPMSTMSTFKVLLCGAVLSRIDAGQE QLGRRRIHYSQNDLVEYSPVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTIGGPKELTAFLLNMGDHVTRLDRWEPELNEAIPN DERDTTTPVAMATTLRKLTLGELLTASRQQLIDWMEADKVAAGPLLRALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIY TTGSOATMDFRNRIAFIGASIKHW*				
	286 amino acids = 31.6 kDa				
✓ AmpR promoter	5123 .. 5227	105			promoter
/gene	= bla				

Description: Mammalian cell vector for high-level expression of proteins with a cleavable N-terminal 6xHis tag.

Created: Tuesday, Jul 31, 2012

Last Modified: Saturday, Jan 5, 2013

Accession Number:

Code Number:

Sequence Author: Invitrogen (Life Technologies)

DNA Type: Synthetic DNA

Laboratory Host Organism: Mammalian Cells

Bacterial Transformation Strain: Unspecified

Dam⁺ Dcm⁺ EcoKI⁺

Comments:

References: