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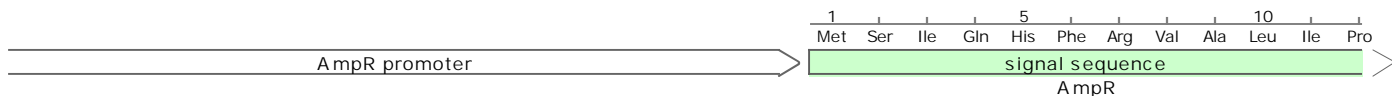
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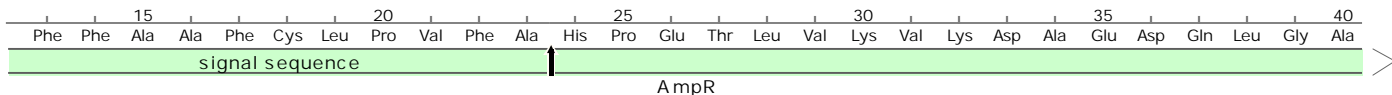
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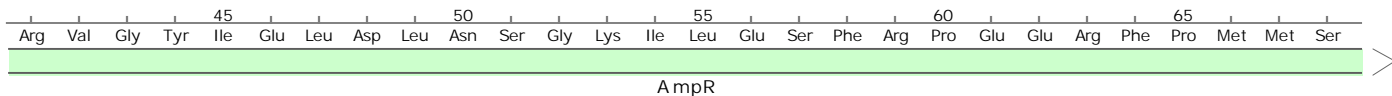
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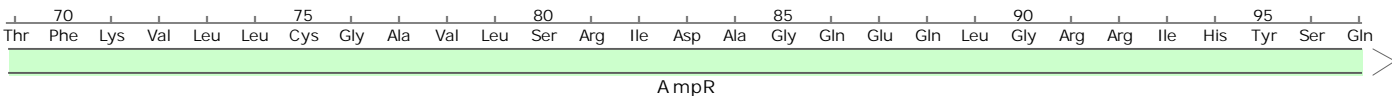
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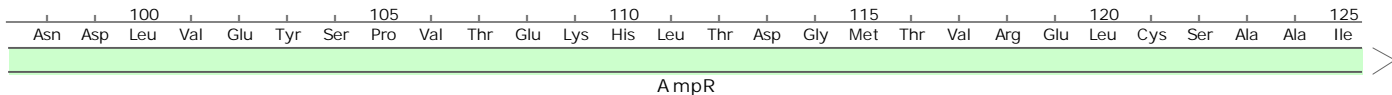
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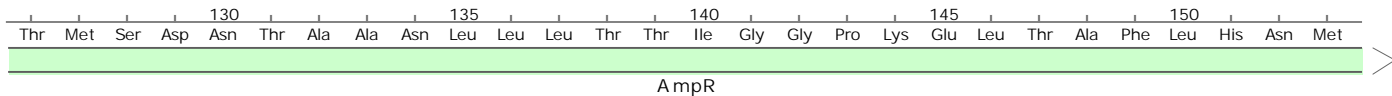
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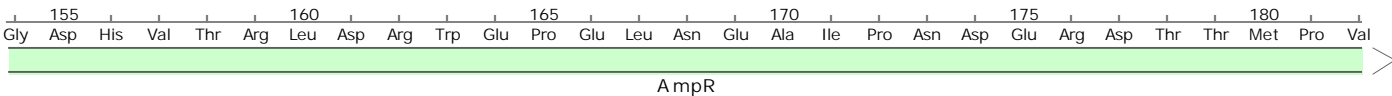
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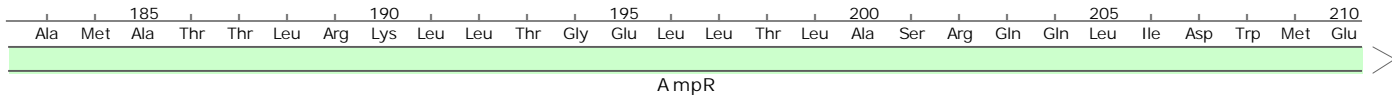
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AmpR

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ori

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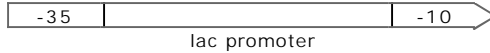
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



















gataacaatttcacacaggaaacagctatgaccatgattac 3'
ctattgtaaagtgtgtcctttgtcgcatactggtaacta 5' (P)

lac operator



Enzymes	Sites	
AarI	1	828
AjiI	1	374
AsiSI	1	2660
AvrII	1	1718
BamHI	1	3339
BclI	1*	853*
BglII	1	138
BipI	1	3631
BmtI	1	908
BoxI	1	2323
Bpu1102I	1	3631
Bsp1407I	1	1422
BspOI	1	908
Bst1107I	1	3921
BstZ17I	1	3921
CpoI	1	2704
Eam1105I	1	5513
Eco91I	1	396
Eco147I	1	465
EheI	1	4288
HindIII	1	4122
MfeI	1	1734
MluI	1	3525
MunI	1	1734
NaeI	1	3977
NcoI	1	2648
NheI	1	904
PdiI	1	3977
PscI	1	6401
PshAI	1	2323
RsrII	1	2704
Sall	1	1944
SbfI	1	4114
SdaI	1	4114
SfaAI	1	2660
SspDI	1	4286
StuI	1	465
XbaI	1	4058
XmaJI	1	1718

Feature	Location	Size (bp)			Type
✓ M13 fwd /note = common sequencing primer, one of multiple similar variants	4131 .. 4147	17			primer_bind
✓ AmpR promoter /gene = bla	4621 .. 4725	105			promoter
✓ AmpR ▶ 2 segments /gene = bla /product = -lactamase /note = confers resistance to ampicillin, carbenicillin, and related antibiotics /translation = MSIQHFRVALIPFFAAFCPLPVFA,HPETLVKVKDAEDQLGARVGYIELDLNSGKILESFRPEERFPM MSTFKVLLCGAVLSRIDAGQE QLGRRRIHYSQNDLVEYSPVTEKHLTDGMTVRELC SAAITMSDNTAANLLTTIGGPKELT AFLHNMGDHSVTRLD RWEPELNEAIPN DERDTTMPVAMATTLRKLLTGELLTLASRQQLIDWMEADKVA GPLLR SALPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIY TTGSOATMDFERNROI AFIGAS I KHW* 286 amino acids = 31.6 kDa	4726 .. 5586	861			CDS
✓ ori /direction = RIGHT /note = high-copy-number ColE1/pMB1/pBR322/pUC origin of replication	5757 .. 6345	589			rep_origin
✓ CAP binding site /bound_moiety = E. coli catabolite activator protein /note = CAP binding activates transcription in the presence of cAMP.	6633 .. 6654	22			protein_bind
✓ lac promoter ▶ 3 segments /note = promoter for the E. coli lac operon	6669 .. 6699	31			promoter
✓ lac operator /bound_moiety = lac repressor encoded by lacI /note = The lac repressor binds to the lac operator to inhibit transcription in E. coli. This inhibition can be relieved by adding lactose or isopropyl-β-D-thiogalactopyranoside (IPTG).	6707 .. 6723	17			protein_bind
✓ M13 rev /note = common sequencing primer, one of multiple similar variants	6731 .. 6747	17			primer_bind

Description:

Created: Tuesday, May 8, 2012

Last Modified: Tuesday, May 8, 2012

Accession Number:

Code Number:

Sequence Author:

DNA Type: Natural DNA

Source Organism:

Sequence Class: UNA

Comments:

References: