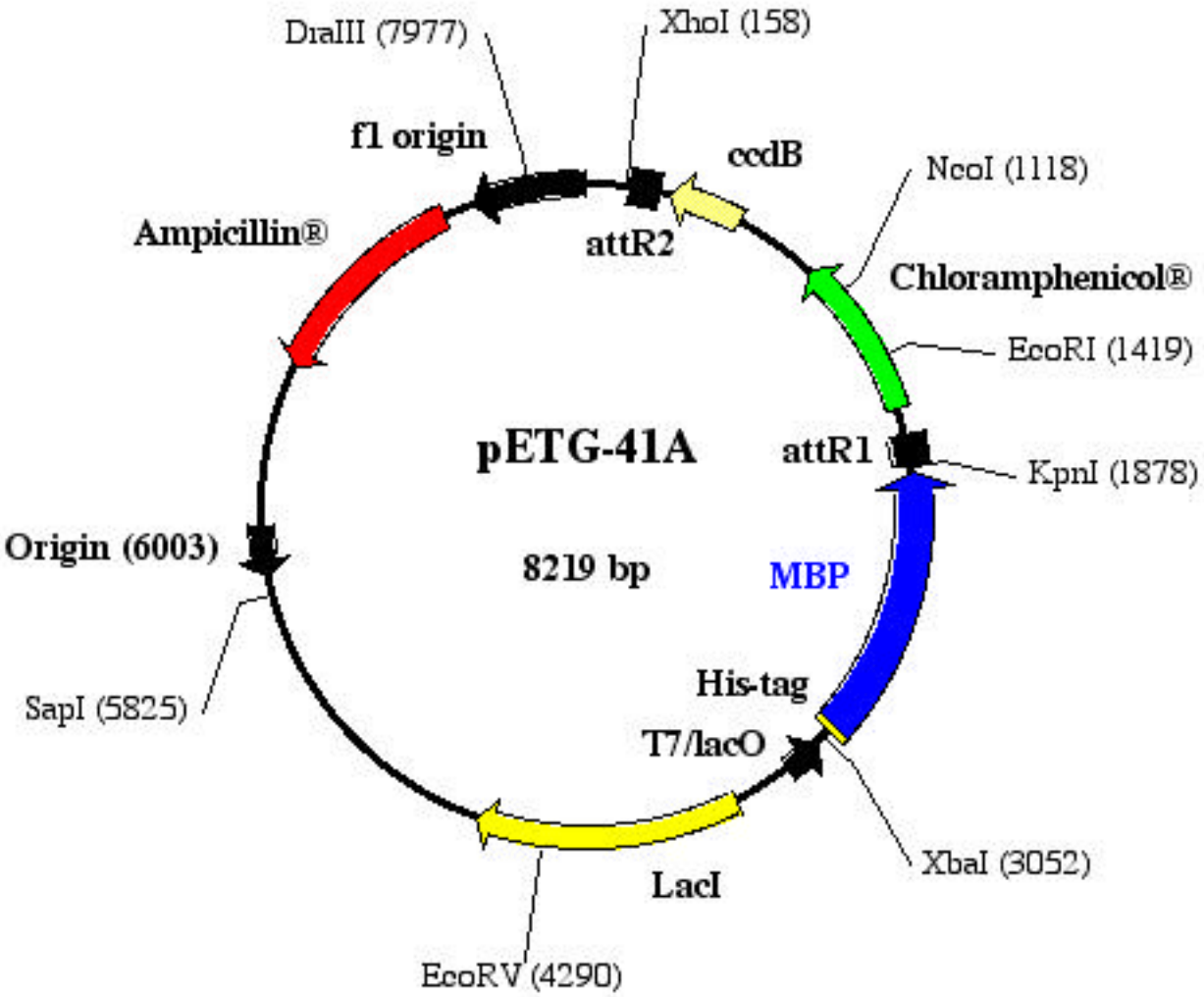
DraIII (7977)
XhoI (158)
f1 origin
ccdB
NcoI (1118)
Ampicillin®
attR2
Chloramphenicol®
EcoRI (1419)
pETG-41A
attR1
KpnI (1878)
Origin (6003)
8219 bp
MBP
His-tag
SapI (5825)
T7/lacO
XbaI (3052)
LacI
EcoRV (4290)

pETG-41A

```
      T7 promoter  -->            lac operator     XbaI
CGAAATTAATACGACTCACTATAGGGGAATTGTGAGCGGATAACAATTCCCCTCTAGAAA
GCTTTAATTATGCTGAGTGATATCCCCTTAACACTCGCCTATTGTTAAGGGGAGATCTTT

                        Rbs                 His-tag
TAATTTTGTTTAACTTTAAGAAGGAGATATACCATGAAACATCACCATCACCATCACCCC
ATTAAAACAAATTGAAATTCTTCCTCTATATGGTACTTTGTAGTGGTAGTGGTAGTGGGG
                                    METLysHisHisHisHisHisHisPro

                                                        KpnI
ATGAAAATCGAAGAAGGTAAA...1068bp...GACGCGCAGACTCCCGGTAGCGGTACC
TACTTTTAGCTTCTTCCTTTT.....MBP....CTGCGCGTCTGAGGGCCATCGCCATGG
METLysIleGluGluGlyLys....356aa...AspAlaGlnThrProGlySerGlyThr

   attR1  -->
ATGACAAGTTTGTACAAAAAAGCTGAACGAGAAACGTAAAATGATATAAATATCAATATA
TACTGTTCAAACATGTTTTTTCGACTTGCTCTTTGCATTTTACTATATTTATAGTTATAT
MetThrSerLeuTyrLysLysAlaGluArgGluThr***


TTAAATTAGATTTTGCATAAA......1574bp......TTGATATTTATATCATTTTAC
AATTTAATCTAAAACGTATTT...Cam®....ccdB...AACTATAAATATAGTAAAATG

                        <--  attR2          His-tag
GTTTCTCGTTCAGCTTTCTTGTACAAAGTGGTGACTCGAGCACCACCACCACCACCACTG
CAAAGAGCAAGTCGAAAGAACATGTTTCACCACTGAGCTCGTGGTGGTGGTGGTGGTGAC
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Single Cutters Listed by Site Order

158	XhoI	1739	Eco52I	2694	SplI	4051	ApaI
160	SciI	1739	EagI	2831	RleAI	4290	EcoRV
291	SalI	1739	NotI	3052	XbaI	4346	HpaI
550	XmaI	1739	XmaIII	3159	SgrAI	5686	Tth111I
552	SrfI	1874	Asp718I	3315	SphI	5825	SapI
552	SmaI	1874	Acc65I	3375	EcoNI	6834	Eam1105I
1118	NcoI	1878	KpnI	4021	BstEII	7977	DraIII
1419	EcoRI	2694	SunI				

Non Cutting Enzymes

AatII	AflII	AgeI	AscI	AsuII	AvrII
Bsu36I	ClaI	Csp45I	CspI	CvnI	Ecl136II
Eco72I	EcoICRI	FseI	HindIII	I-PpoI	MfeI
Mlu113I	MstII	NdeI	NheI	NruI	NsiI
PacI	PinAI	PmaCI	PmeI	SacI	SacII
SauI	SfiI	SnaBI	SpeI	SpoI	SstI
SstII	StuI	SwaI			