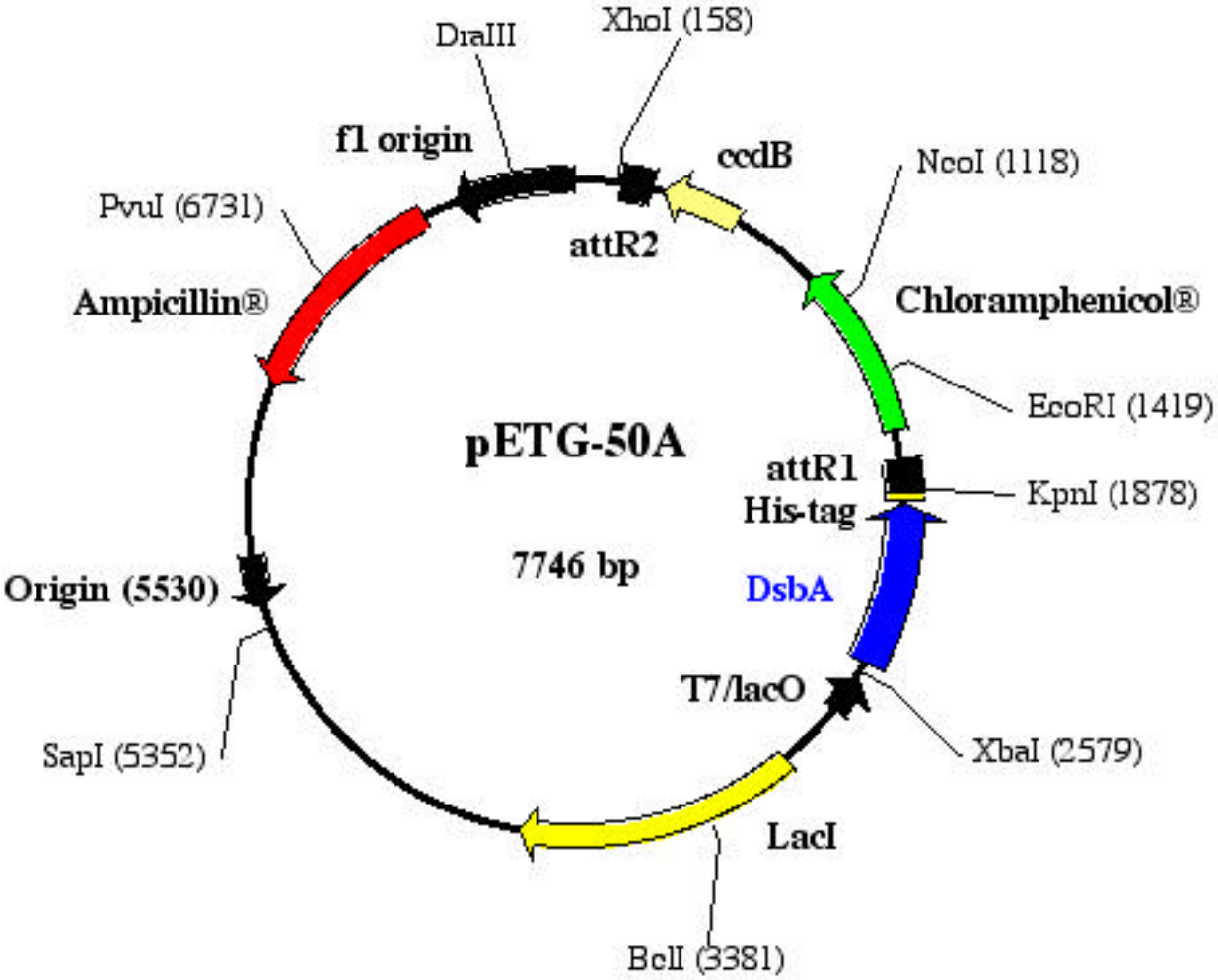
DraIII
XhoI (158)
f1 origin
ccdB
NcoI (1118)
PvuI (6731)
attR2
Ampicillin®
Chloramphenicol®
EcoRI (1419)
pETG-50A
attR1
His-tag
KpnI (1878)
7746 bp
Origin (5530)
DsbA
T7/lacO
SapI (5352)
XbaI (2579)
LacI
BclI (3381)

pETG-50A

```
     T7 promoter  -->            Lac operator    XbaI
GAAATTAATACGACTCACTATAGGGGAATTGTGAGCGGATAACAATTCCCCTCTAGAAAT
CTTTAATTATGCTGAGTGATATCCCCTTAACACTCGCCTATTGTTAAGGGGAGATCTTTA

                    rbs
AATTTTGTTTAACTTTAAGAAGGAGATATACATATGAAAAAGATTTGGCTGGCGCTGGCT
TTAAAACAAATTGAAATTCTTCCTCTATATGTATACTTTTTCTAAACCGACCGCATGCGA
                                  METLysLysIleTrpLeuAlaTyrAla

                                            His-tag KpnI
GGT..591bp..AAAGGATCAACTAGTGGTTCTGGTCATCACCATCACCATCACGGTACC
CCA...DsbA..TTTCCTAGTTGATCACCAAGACCAGTAGTGGTAGTGGTAGTGAGGCGC
Gly..197aa..LysGlySerThrSerGlySerGlyHisHisHisHisHisHisGlyThr

   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	XmaIII	2428	AscI	3381	BclI
160	SciI	1739	NotI	2439	PinAI	3578	ApaI
291	SalI	1739	Eco52I	2439	AgeI	5213	Tth111I
550	XmaI	1874	Asp718I	2541	NdeI	5352	SapI
552	SrfI	1874	Acc65I	2579	XbaI	6361	Eam1105I
552	SmaI	1878	KpnI	2686	SgrAI	6731	PvuI
1118	NcoI	1907	SpeI	2842	SphI	6731	XorII
1419	EcoRI	1929	AflII	2902	EcoNI	7504	DraIII
1739	EagI	2045	MfeI	3051	ApaBI		

Non Cutting Enzymes

AatII	AsuII	AvrII	Bsu36I	ClaI	Csp45I
CspI	CvnI	Ecl136II	Eco72I	EcoICRI	FseI
HindIII	I-PpoI	Mlu113I	MstII	NheI	NruI
NsiI	PacI	PmaCI	PmeI	RleAI	SacI
SacII	SauI	SfiI	SnaBI	SplI	SpoI
SstI	SstII	StuI	SunI	SwaI	