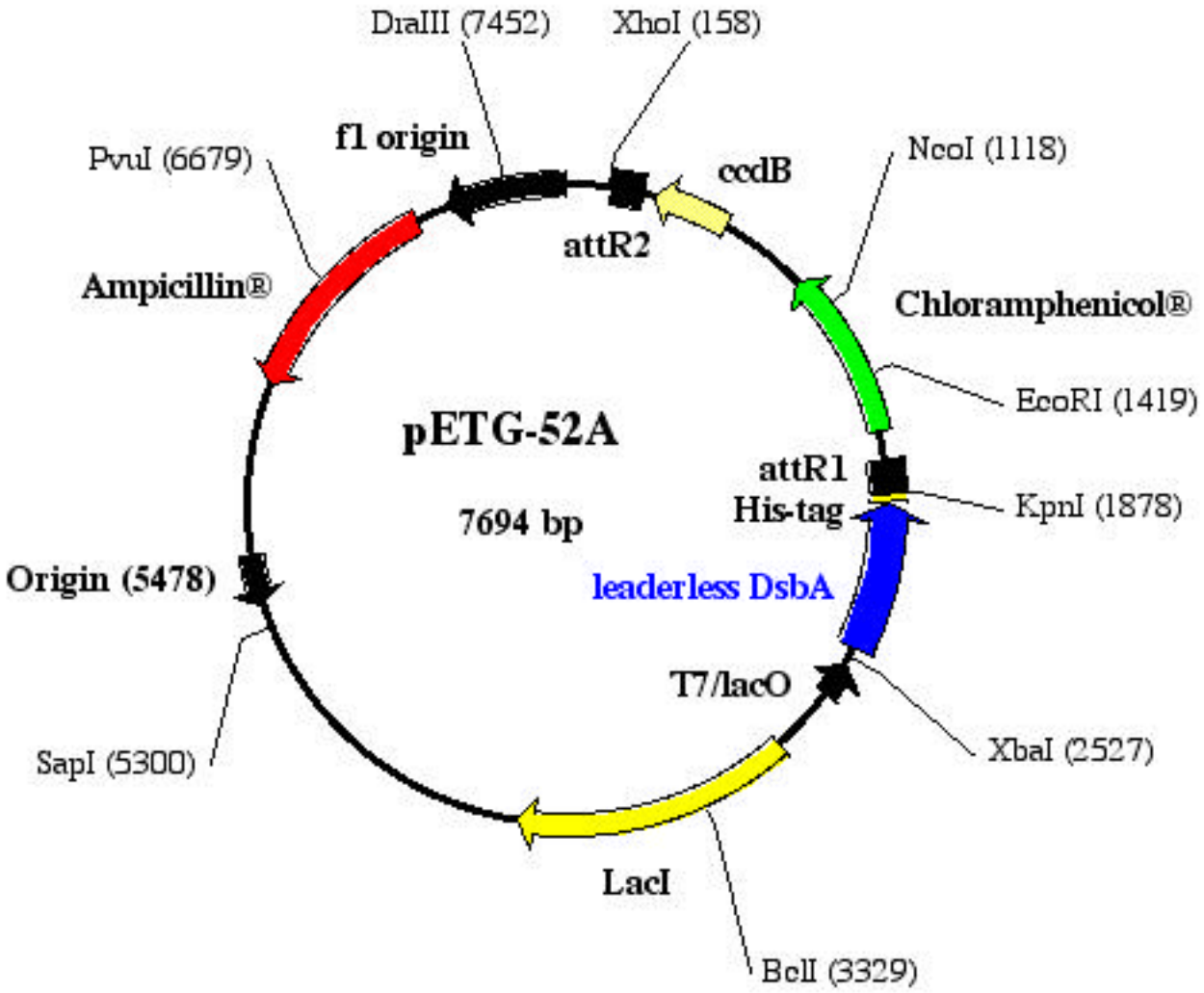
DraIII (7452)
XhoI (158)
f1 origin
PvuI (6679)
ccdB
NcoI (1118)
attR2
Ampicillin®
Chloramphenicol®
EcoRI (1419)
pETG-52A
attR1
His-tag
KpnI (1878)
7694 bp
Origin (5478)
leaderless DsbA
T7/lacO
XbaI (2527)
SapI (5300)
LacI
BclI (3329)

pETG-52A

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

                    rbs
AATTTTGTTTAACTTTAAGAAGGAGATATACATATGAAAGCGCAGTATGAAGATGGTAAA
TTAAAACAAATTGAAATTCTTCCTCTATATGTATACTTTCGCGTCATACTTCTACCATTT
                                   METLysAlaGlnTyrGluAspGlyLys

                                            His-tag KpnI
CAG....543bp...GGATCAACTAGTGGTTCTGGTCATCACCATCACCATCACGGTACC
GTC...LL-DsbA..CCTAGTTGATCACCAAGACCAGTAGTGGTAGTGGTAGTGAGGCGC
Val....181aa...GlySerThrSerGlySerGlyHisHisHisHisHisHisGlyThr

   attR1  -->
ATGACAAGTTTGTACAAAAAAGCTGAACGAGAAACGTAAAATGATATAAATATCAATATA
TACTGTTCAAACATGTTTTTTCGACTTGCTCTTTGCATTTTACTATATTTATAGTTATAT
MetThrSerLeuTyrLysLysAlaGluArgGluThr***

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

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

158	XhoI	1739	EagI	2428	AscI	3329	BclI
160	SciI	1739	Eco52I	2439	PinAI	3526	ApaI
291	SalI	1739	XmaIII	2439	AgeI	5161	Tth111I
550	XmaI	1874	Acc65I	2527	XbaI	5300	SapI
552	SmaI	1874	Asp718I	2634	SgrAI	6309	Eam1105I
552	SrfI	1878	KpnI	2790	SphI	6679	PvuI
1118	NcoI	1907	SpeI	2850	EcoNI	6679	XorII
1419	EcoRI	1929	AflII	2999	ApaBI	7452	DraIII
1739	NotI	2045	MfeI				

Non Cutting Enzymes

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