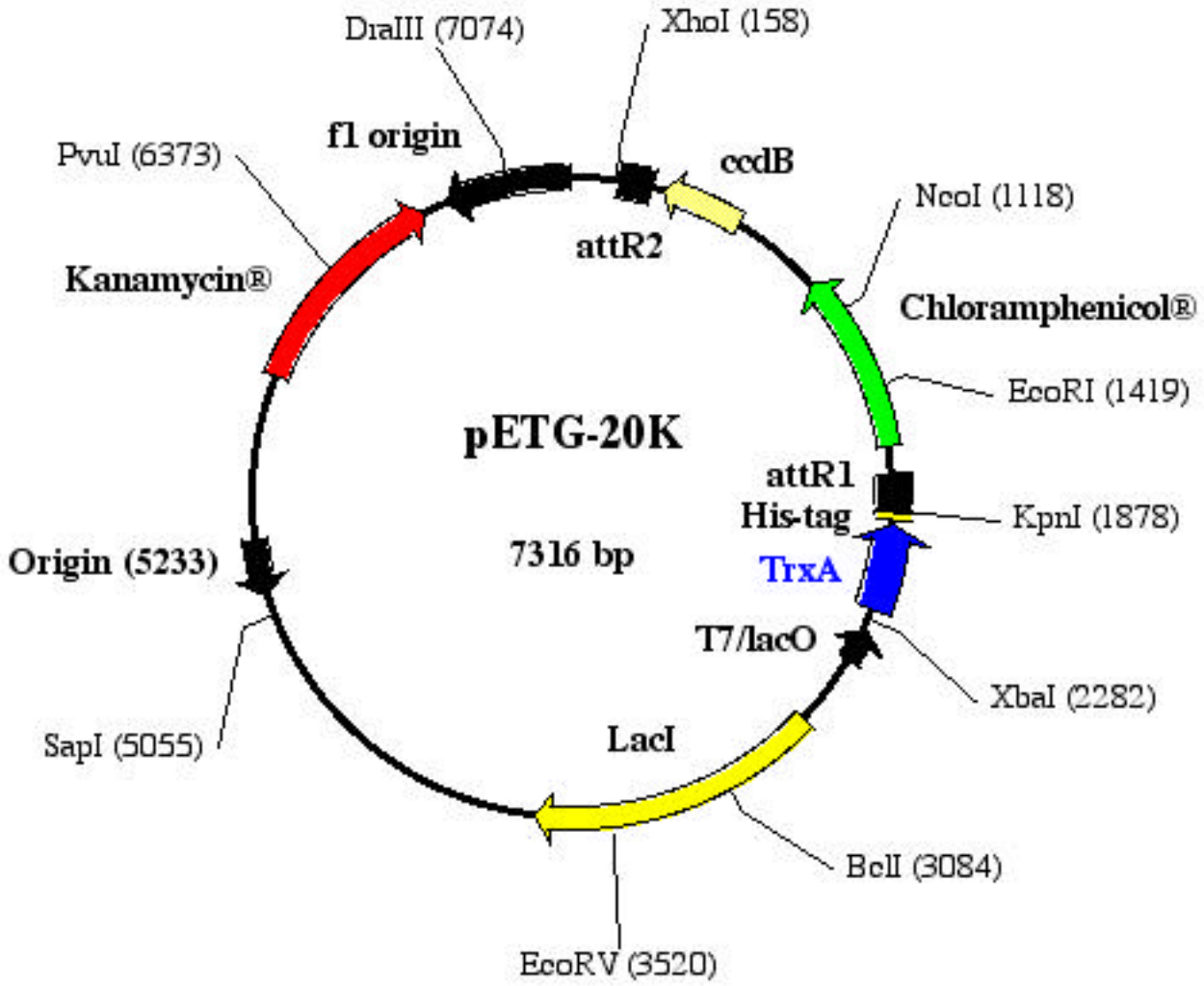
DraIII (7074)
XhoI (158)
f1 origin
PvuI (6373)
ccdB
NcoI (1118)
attR2
Kanamycin®
Chloramphenicol®
EcoRI (1419)
pETG-20K
attR1
His-tag
KpnI (1878)
7316 bp
Origin (5233)
TrxA
T7/lacO
XbaI (2282)
SapI (5055)
LacI
BclI (3084)
EcoRV (3520)

pETG-20K

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

                      rbs
AATTTTGTTTAACTTTAAGAAGGAGATATACATATGAGCGATAAAATTATTCACCTGACT
TTAAAACAAATTGAAATTCTTCCTCTATATGTATACTCGCTATTTTAATAAGTGGACTGA
                                   METSerAspLysIleIleHisLeuThr

                                            His-tag KpnI
GACGACAGT...297bp....GGTTCTGGCCATATGCACCATCATCATCATCATGGTACC
CTGCTGTCA....TrxA....CCAAGACCGGTATACGTGGTAGTAGTAGTAGTACCATGG
AspAspSer....99aa....GlySerGlyHisMetHisHisHisHisHisHisSerSer

   attR1  -->
ATGACAAGTTTGTACAAAAAAGCTGAACGAGAAACGTAAAATGATATAAATATCAATATA
TACTGTTCAAACATGTTTTTTCGACTTGCTCTTTGCATTTTACTATATTTATAGTTATAT
MetThrSerLeuTyrLysLysAlaGluArgGluThr***

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

                        <--  attR2            His-tag
GTTTCTCGTTCAGCTTTCTTGTACAAAGTGGTGACTCGAGCACCACCACCACCACCACTG
CAAAGAGCAAGTCGAAAGAACATGTTTCACCACTGAGCTCGTGGTGGTGGTGGTGGTGAC
```

Single Cutters Listed by Site Order

80	EspI	1419	EcoRI	2348	BglII	4152	MstI
80	Bpu1102I	1739	Eco52I	2389	SgrAI	4916	Tth111I
158	XhoI	1739	EagI	2545	SphI	5055	SapI
160	SciI	1739	XmaIII	2754	ApaBI	5344	BsiI
291	SalI	1739	NotI	3084	BclI	5719	Eco57I
301	PstI	1874	Acc65I	3251	BstEII	6030	NruI
304	BspMI	1874	Asp718I	3281	ApaI	6030	SpoI
410	Eco31I	1878	KpnI	3520	EcoRV	6373	PvuI
552	SrfI	2142	CspI	3576	HpaI	6373	XorII
1006	ScaI	2282	XbaI	4134	BglI	7074	DraIII
1118	NcoI						

Non Cutting Enzymes

AatII	AflII	AgeI	AscI	AsuII	AvrII
Bsu36I	Csp45I	CvnI	Eam1105I	Ecl136II	Eco72I
EcoICRI	FseI	HindIII	I-PpoI	MfeI	Mlu113I
MstII	NheI	PacI	PinAI	PmaCI	PmeI
RleAI	SacI	SacII	SauI	SfiI	SnaBI
SpeI	SplI	SstI	SstII	StuI	SunI
SwaI					