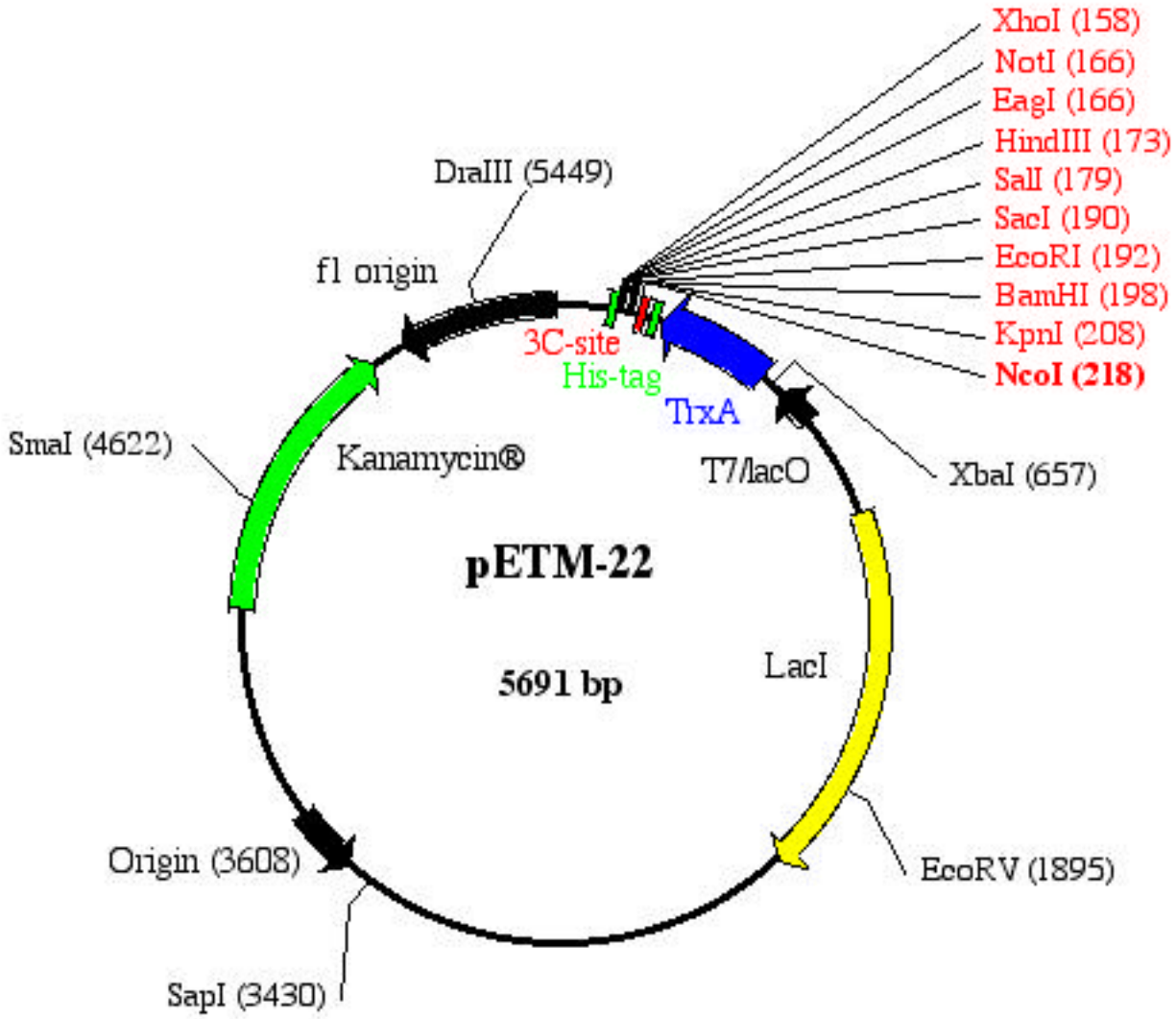
XhoI (158)
NotI (166)
EagI (166)
HindIII (173)
SalI (179)
SacI (190)
EcoRI (192)
BamHI (198)
KpnI (208)
NcoI (218)
DraIII (5449)
f1 origin
3C-site
His-tag
TrxA
SmaI (4622)
Kanamycin®
T7/lacO
XbaI (657)
pETM-22
5691 bp
LacI
Origin (3608)
EcoRV (1895)
SapI (3430)

pETM-22

```
     T7 promoter  -->            Lac operator     XbaI
CGAAATTAATACGACTCACTATAGGGGAATTGTGAGCGGATAACAATTCCCCTCTAGAAATA
GCTTTAATTATGCTGAGTGATATCCCCTTAACACTCGCCTATTGTTAAGGGGAGATCTTTAT

                    rbs
ATTTTGTTTAACTTTAAGAAGGAGATATACATATGAGCGATAAAATTATTCACCTGACTGAC
TAAAACAAATTGAAATTCTTCCTCTATATGTATACTCGCTATTTTAATAAGTGGACTGACTG
                                   METSerAspLysIleIleHisLeuThrAsp

                                                 His-tag
GACAGTTTT...288bp...GGTTCTGGTTCTGGCCATATGCACCATCATCATCATCATTCT
CTGTCAAAA....TrxA...CCAAGACCAAGACCGGTATACGTGGTAGTAGTAGTAGTAAGA
AspSerPhe....96aa...GlySerGlySerGlyHisMetHisHisHisHisHisHisSer


                 3C-site  NcoI          KpnI  BamHI EcoRI
TCTGGTCTGGAAGTTCTGTTCCAG GGGCCCATGGACTAATGAGGTACCGGATCCGAATTCG
AGACCAGACCTTCAAGACAAGGTC CCCGGGTACCTGATTACTCCATGGCCTAGGCTTAAGC
SerGlyLeuGluValLeuPheGln|GlyProMETAsp******


                      NotI
SacI   SalI HindIII EagI    XhoI        C-His-tag
AGCTCCGTCGACAAGCTTGCGGCCGCACTCGAGCACCACCACCACCACCACTGAGATCCGGC
TCGAGGCAGCAGTTCGAACGAAGGCGTGAGCTCGTGGTGGTGGTGGTGGTGACTCTAGGCCG
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Single Cutters Listed by Site Order

80	EspI	190	SacI	723	BglII	3291	Tth111I
80	Bpu1102I	190	SstI	764	SgrAI	3430	SapI
158	XhoI	192	EcoRI	920	SphI	3719	BsiI
160	SciI	198	BamHI	1129	ApaBI	3962	AlwNI
166	EagI	204	Acc65I	1445	MluI	4094	Eco57I
166	NotI	204	Asp718I	1459	BclI	4405	NruI
166	XmaIII	208	KpnI	1626	BstEII	4405	SpoI
166	Eco52I	218	NcoI	1856	BssHII	4620	XmaI
173	HindIII	279	BalI	1895	EcoRV	4622	SmaI
179	SalI	279	MscI	1951	HpaI	4748	XorII
188	Ecl136II	517	CspI	2509	BglI	4748	PvuI
188	EcoICRI	657	XbaI	2527	MstI	5449	DraIII

Non Cutting Enzymes

AatII	AflII	AgeI	AhaIII	AscI	AsuII
AvrII	Bsp1407I	BspMI	Bsu36I	Csp45I	CvnI
DraI	Eam1105I	Eco31I	Eco72I	FseI	I-PpoI
MfeI	Mlu113I	MstII	NheI	PacI	PinAI
PmaCI	PmeI	PstI	RleAI	SacII	SauI
ScaI	SfiI	SnaBI	SpeI	SplI	SrfI
SstII	StuI	SunI	SwaI		