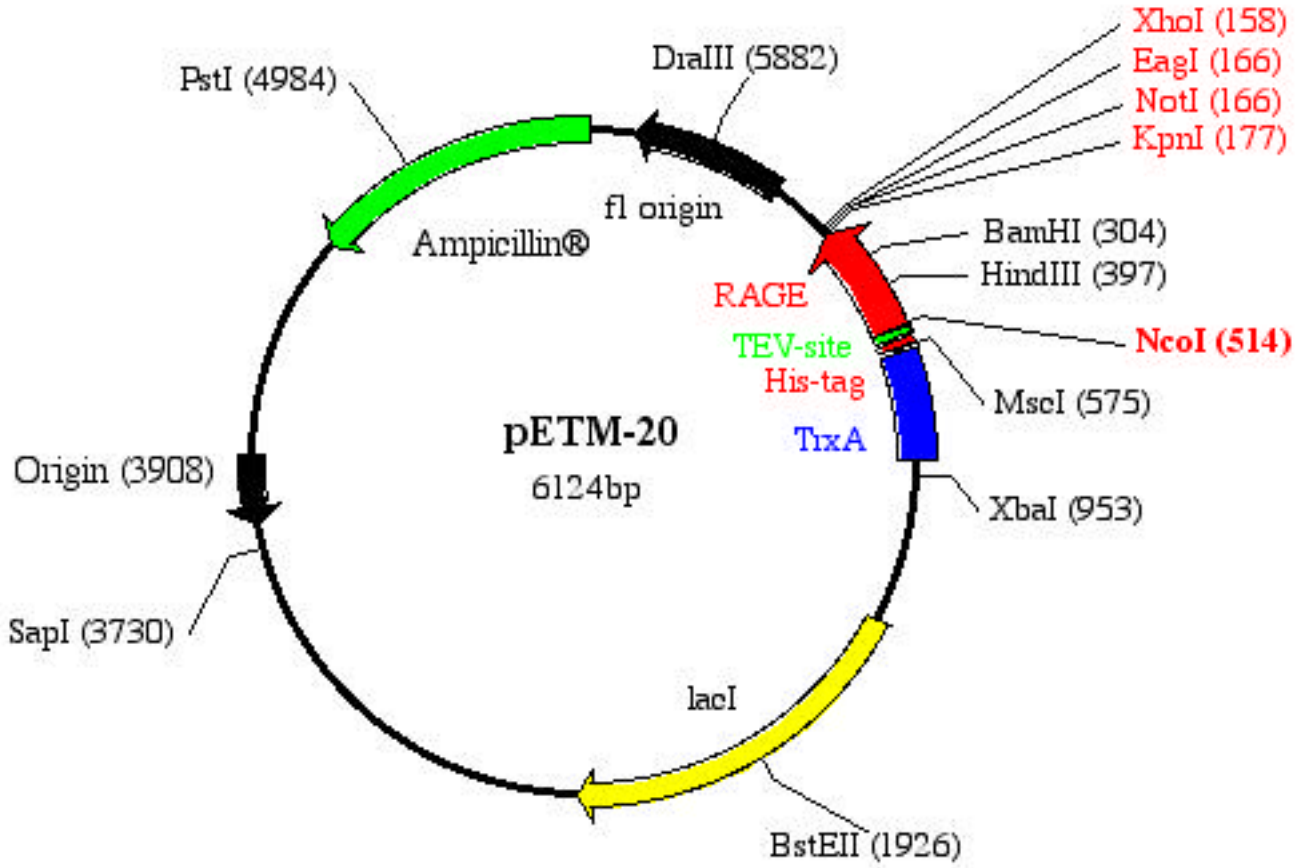
XhoI (158)
EagI (166)
NotI (166)
KpnI (177)
DraIII (5882)
PstI (4984)
f1 origin
Ampicillin®
BamHI (304)
HindIII (397)
RAGE
TEV-site
His-tag
NcoI (514)
MscI (575)
pETM-20
6124bp
TrxA
Origin (3908)
XbaI (953)
SapI (3730)
lacI
BstEII (1926)

pETM-20

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

                        rbs
TAATTTTGTTTAACTTTAAGAAGGAGATATACCATGAGCGATAAAATTATTCACCTGACT
ATTAAAACAAATTGAAATTCTTCCTCTATATGGTACTCGCTATTTTAATAAGTGGACTGA
                                     METSerAspLysIleIleHisLeuThr

                                            His-tag
GACGACAGT...297bp....GGTTCTGGCCATATGCACCATCATCATCATCATTCTTCT
CTGCTGTCA....TrxA....CCAAGACCGGTATACGTGGTAGTAGTAGTAGTAAGAAGA
AspAspSer....99aa....GlySerGlyHisMetHisHisHisHisHisHisSerSer

    TEV-site      NcoI
GGTGAGAATCTTTATTTTCAG GGCGCCATGGGTGCTCAAAAC...303bp...GTAGAT
CCACTCTTAGAAATAAAAGTC CCTCTTTACCCACGAGTTTTG....RAGE...CATCTA
GlyGluAsnLeuTyrPheGlu|GlyAlaMETGlyAlaGlnAsn...101aa...ValAsp

                    NotI
                    EagI
                KpnI            XhoI          C-His-tag
TCTGCCTCTGAATAAGGTACCGCGGCCGCACTCGAGCACCACCACCACCACCACTGAGAT
AGACGGAGACTTATTCCATGGCGCCGGCGTGAGCTCGTGGTGGTGGTGGTGGTGACTCTA
SerAlaSerGlu***
```

Single Cutters Listed by Site Order

80	Bpu1102I	172	SacII	813	CspI	2156	BssHII
80	EspI	173	Asp718I	953	XbaI	2251	HpaI
158	XhoI	173	Acc65I	1064	SgrAI	3730	SapI
160	SciI	177	KpnI	1220	SphI	4739	Eam1105I
166	EagI	304	BamHI	1280	EcoNI	4984	PstI
166	Eco52I	397	HindIII	1429	ApaBI	5109	PvuI
166	XmaIII	514	NcoI	1745	MluI	5109	XorII
166	NotI	575	MscI	1759	BclI	5219	ScaI
170	Mlu113I	575	BalI	1926	BstEII	5882	DraIII
172	SstII						

Non Cutting Enzymes

AatII	AflII	AgeI	AscI	AsuII	AvrII	BglII
BsmI	Bsp1407I	BspMI	Bsu36I	Csp45I	CvnI	Eco72I
EcoICRI	EcoRI	EcoRV	FseI	I-PpoI	MfeI	MstII
NheI	NruI	NsiI	PacI	PinAI	PmaCI	PmeI
RleAI	SacI	SalI	SauI	SfiI	SmaI	SnaBI
SpeI	SplI	SpoI	SrfI	SstI	StuI	SunI
SwaI	XmaI					