pET-14b Vector

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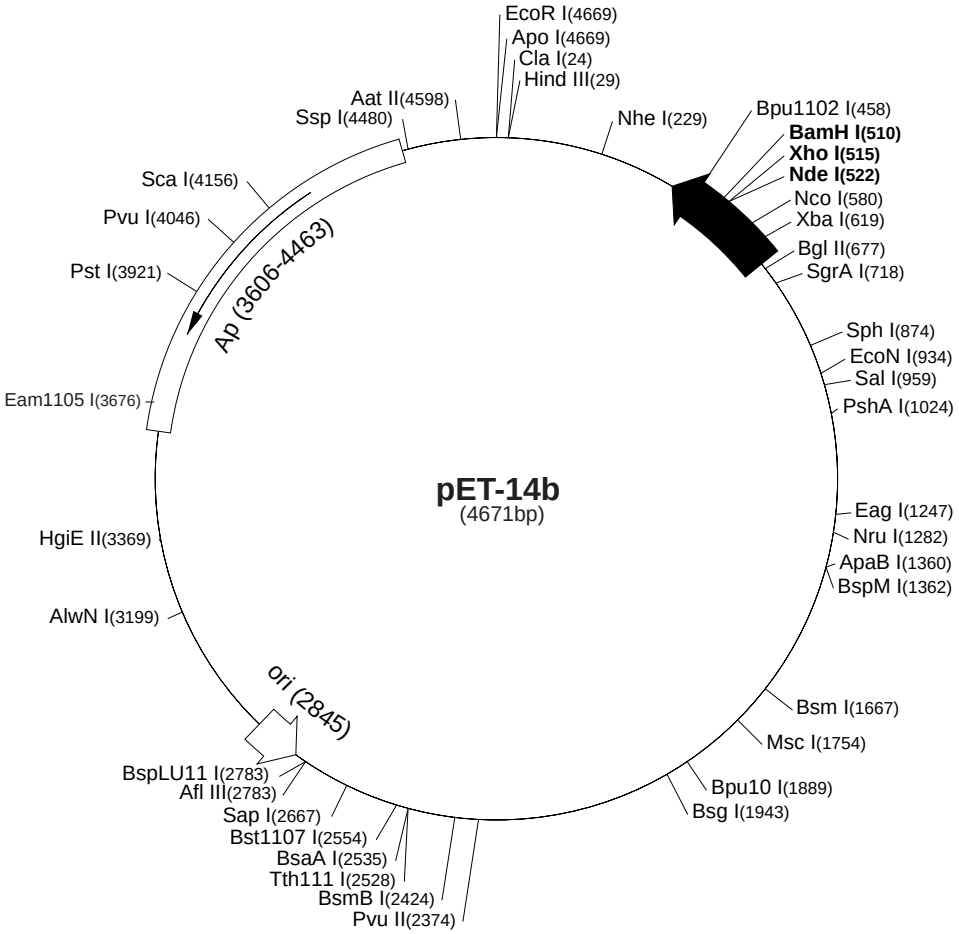
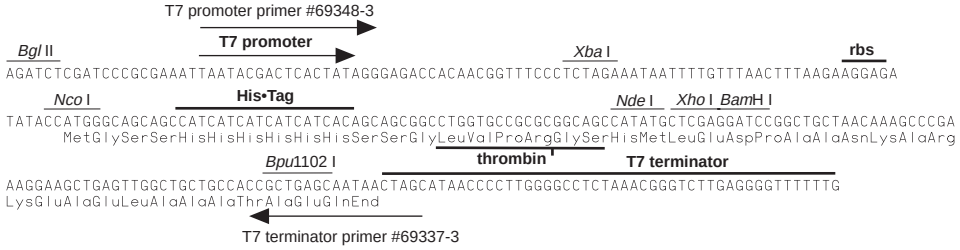
The pET-14b vector (Cat. No. 69660-3) carries an N-terminal His•Tag® sequence followed by a thrombin site and three cloning sites. Unique sites are shown on the circle map. Note that the sequence is numbered by the pBR322 convention, so the T7 expression region is reversed on the circular map. The cloning/expression region of the coding strand transcribed by T7 RNA polymerase is shown below.

pET-14b sequence landmarks

T7 promoter	646-662
T7 transcription start	645
His•Tag coding sequence	554-571
Multiple cloning sites	
(*Nde* I -*Bam*H I)	510-526
T7 terminator	404-450
pBR322 origin	2845
bla coding sequence	3606-4463





pET-14b cloning/expression region

pET-14b Restriction Sites

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Enzyme	# Sites	Locations
AatII	1	4598
AccI	2	960 2553
AceIII	5	1005 2292 2433 2735 3975
AciI	72	
AflIII	1	2783
AluI	18	
AlwI	14	
Alw21I	8	280 899 1486 1777 2601 3101 4262 4347
Alw44I	3	2597 3097 4343
AlwNI	1	3199
ApaBI	1	1360
ApoI	1	4669
AvaI	2	515 1733
AvaII	8	1107 1195 1444 1747 1789 2068 3814 4036
BamHI	1	510
BanI	10	76 119 537 721 742 856 1074 1513 1597 3624
BanII	2	783 797
BbsI	3	1038 1901 4654
BbvI	28	
BccI	10	570 768 861 1298 1387 1694 1706 3713 3837 4124
Bce83I	7	399 993 1163 2874 3172 3413 4281
BcefI	3	918 1475 3285
BcgI	6	1005 1039 2360 2394 4181 4215
BfaI	7	230 448 620 1797 3278 3531 3866
BglI	3	1243 1477 3796
BglII	1	677
BpmI	4	1140 1694 2310 3746
Bpu10I	1	1889
Bpu1102I	1	458
BsaI	2	644 3737
BsaAI	1	2535
BsaBI	3	676 682 1980
BsaHI	6	722 743 857 1514 4213 4595
BsaJI	10	115 129 435 580 836 842 1475 1677 1755 2943
BsaWI	6	380 1001 1972 2989 3136 3967
BsbI	2	2499 4219
BscGI	13	
BsgI	1	1943
BsiI	3	2956 4340 4647
BsiEI	7	289 964 1250 2699 3123 4046 4195
BsII	21	
BsmI	1	1667
BsmAI	4	644 2424 3737 4513
BsmBI	1	2424
BsmFI	4	860 1181 1406 2054
BsoFI	52	
Bsp24I	8	689 721 3276 3308 3454 3486 4580 4612
Bsp1286I	10	280 783 797 899 1486 1777 2601 3101 4262 4347
BspEI	2	380 1972
BspGI	3	1367 1444 2309
BspLU11I	1	2783
BspMI	1	1362
BsrI	19	
BsrBI	2	2716 4517
BsrDI	2	3737 3911
BsrFI	7	160 709 718 1077 1237 1591 3756
Bst1107I	1	2554
BstYI	9	510 677 1975 3424 3435 3521 3533 4301 4318
Cac8I	31	
CjeI	16	
CjePI	22	
ClaI	1	24
CviJI	81	
CviRI	21	
DdeI	10	458 479 1889 2051 2591 3058 3467 3633 4173 4599
DpnI	25	
DraI	3	3542 3561 4253
DrdI	2	2476 2891
DsaI	3	580 836 1755
EaeI	6	295 707 839 1247 1752 4064
EagI	1	1247
Eam1105I	1	3676
EarI	2	2667 4471
EciI	4	1703 2857 3003 3831
Eco47III	4	234 804 1085 2037
Eco57I	2	3331 4343
EcoNI	1	934
EcoO109I	5	431 832 1747 1789 4652
EcoRI	1	4669
EcoRII	7	129 540 1366 1749 2809 2930 2943
EcoRV	2	187 378
FauI	11	
FokI	12	
FspI	4	262 1666 1764 3898
GdiII	5	295 707 839 1247 4064
HaeI	7	1228 1300 1357 1754 2798 2809 3261\
HaeII	11	
HaeIII	24	
HgaI	11	
HgiEII	1	3369
HhaI	32	
Hin4I	5	16 334 1449 3675 3749
HincII	2	961 4217
HindIII	1	29
HinfI	11	
HphI	12	
MaeII	10	1209 1265 1854 1878 2108 2534 3486 3902 4275 4595
MaeIII	17	
MboII	11	
MmeI	4	222 309 2998 3182
MnlI	31	
MscI	1	1754
MseI	18	
MslI	7	1339 1770 1965 2356 3928 4087 4446
MspI	28	
MspA1I	8	462 548 1449 2374 2493 3125 3370 4311
MwoI	36	
NarI	4	722 743 857 1514
NciI	10	171 843 1567 1793 2121 2427 2462 3163 3859 4210
NcoI	1	580
NdeI	1	522
NgoAIV	4	709 1077 1237 1591
NheI	1	229
NlaIII	27	
NlaIV	26	
NruI	1	1282
NspI	4	874 2128 2420 2787
Pfl1108I	2	1066 3694
PflMI	2	1629 1678
PleI	5	660 948 2677 3162 3665
PshAI	1	1024
Psp5II	2	1747 1789
Psp1406I	4	1209 2108 3902 4275
PstI	1	3921
PvuI	1	4046
PvuII	1	2374
RcaI	4	797 3503 4511 4616
RsaI	3	165 2589 4156
SalI	1	959
SapI	1	2667
Sau96I	16	
Sau3AI	25	
ScaI	1	4156
ScrFI	17	
SfaNI	22	
SfcI	5	138 645 3048 3239 3917
SgrAI	1	718
SphI	1	874
SspI	1	4480
StyI	3	435 580 1677
TaqI	10	24 339 516 674 682 960 1435 1576 2883 4327
TaqII	6	978 2685 4024 4209 4362 4379
TfiI	6	1160 1314 1612 1833 2337 2758
ThaI	26	
TseI	28	
Tsp45I	9	124 212 1188 1455 2222 2435 2530 3932 4143
Tsp509I	10	58 251 611 661 1627 1641 3543 3849 4104 4669
Tth111I	1	2528
Tth111II	5	2244 3373 3380 3412 4668
UbaJI	24	
VspI	2	660 3848
XbaI	1	619
XhoI	1	515
XmnI	2	2341 4275

Enzymes that do not cut pET-14b:

AflII	AgeI	ApaI	AscI	AvrII
BaeI	BclI	BmgI	BsaXI	BseRI
BsrGI	BssHII	BstEII	BstXI	Bsu36I
DraIII	DrdII	FseI	HpaI	KpnI
MluI	MunI	NotI	NsiI	NspV
PacI	PmeI	PmlI	RleAI	RsrII
SacI	SacII	SexAI	SfiI	SgfI
SmaI	SnaBI	SpeI	SrfI	Sse8387I
StuI	SunI	SwaI	XcmI	