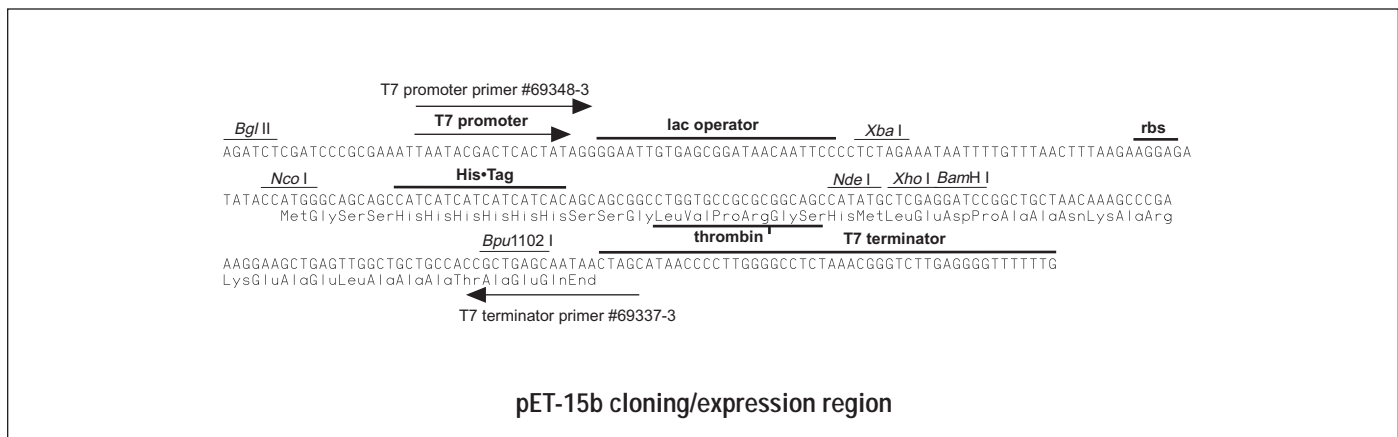
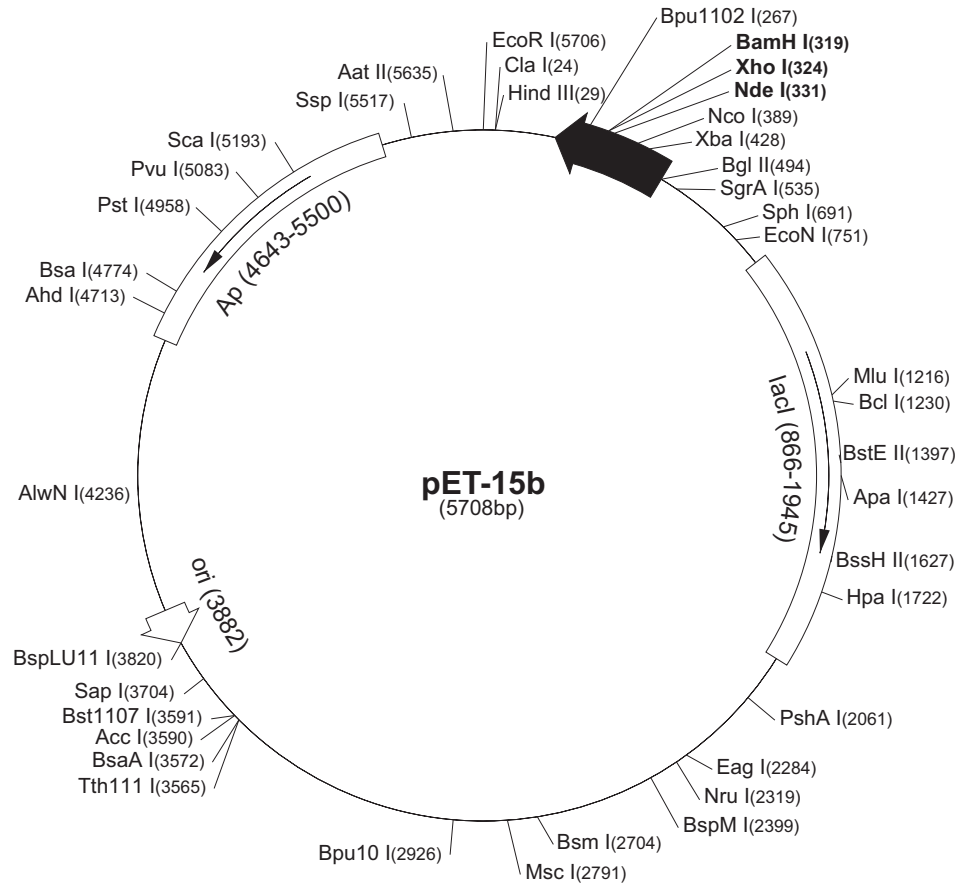


The pET-15b vector (Cat. No. 69661-3) carries an N-terminal His•Tag[®] sequence followed by a thrombin site and three cloning sites. Unique sites are shown on the circle map. Note that the sequence is numbered by the pBR322 convention, so the T7 expression region is reversed on the circular map. The cloning/expression region of the coding strand transcribed by T7 RNA polymerase is shown below.

pET-15b sequence landmarks

T7 promoter	453-469
T7 transcription start	452
His•Tag coding sequence	362-380
Multiple cloning sites (<i>Nde</i> I - <i>Bam</i> H I)	319-335
T7 terminator	213-259
lacI coding sequence	(866-1945)
pBR322 origin	3882
<i>bla</i> coding sequence	4643-5500



pET-15b cloning/expression region

pET-15b Restriction Sites

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations
AatII	1	5635	BssHII	1	1627	PleI	7	477 765 852 1648 3714
AccI	1	3590	Bst1107I	1	3591			4199 4702
AccIII	7	983 1711 2042 3329 3470 3772 5012	BstEII	1	1397	PshAI	1	2061
AcII	91		BstXI	3	1018 1147 1270	Psp5II	2	2784 2826
AflIII	2	1216 3820	BstYI	11		Psp1406I	5	878 2246 3145 4939 5312
AluI	24		Cac8I	41		PstI	1	4958
AlwI	16		CjeI	25		PvuI	1	5083
Alw21I	8	716 1200 2523 2814 3638 4138 5299 5384	CjePI	26		PvuII	3	1816 1909 3411
			Clal	1	24	RcaI	4	614 4540 5548 5653
Alw44I	4	1196 3634 4134 5380	CviJI	97		RsaI	4	165 1363 3626 5193
AlwNI	1	4236	CviRI	26		SapI	1	3704
ApaI	1	1427	Ddel	11		Sau96I	21	
ApaBI	2	900 2397	Dpnl	29		Sau3AI	29	
ApoI	2	1491 5706	DraI	3	4579 4598 5290	Scal	1	5193
AvaI	2	324 2770	DrdI	2	3513 3928	ScrFI	25	
Avall	9	1768 2144 2232 2481 2784 2826 3105 4851 5073	DrdII	1	939	SfaNI	24	
			Dsal	3	389 653 2792	Sfcl	5	138 462 4085 4276 4954
BamHI	1	319	EaeI	6	524 656 1890 2284 2789 5101	SgrAI	1	535
BanI	13		EagI	1	2284	SphI	1	691
BanII	3	600 614 1427	Eam1105I	1	4713	SspI	1	5517
BbsI	5	1362 1701 2075 2938 5691	EarI	3	834 3704 5508	StyI	3	244 389 2714
BbvI	31		Ecil	5	993 2740 3894 4040 4868	TaqI	13	
BccI	16		Eco47III	3	621 2122 3074	TaqII	8	1124 1342 2015 3722 5061
Bce83I	7	208 2030 2200 3911 4209 4450 5318	Eco57I	2	4368 5380	5246	5399	5416
Bcefl	5	735 1076 1703 2512 4322	EcoNI	1	751	TfiI	7	1895 2197 2351 2649 2870 3374 3795
Bcgl	8	1508 1542 2042 2076 3397	EcoO109I	5	240 649 2784 2826 5689	Thal	41	
3431	5218	5252	EcoRI	1	5706	Tsel	31	
BclI	1	1230	EcoRII	11		Tsp45I	9	124 1397 2225 2492 3259 3472 3567 4969 5180
Bfal	6	257 429 2834 4315 4568 4903	EcoRV	2	187 1666			
			FauI	18		Tsp509I	16	
BglI	3	2280 2514 4833	FokI	14		Tth111I	1	3565
BglII	1	494	FspI	3	2703 2801 4935	Tth111II	7	1055 1748 3281 4410 4417 4449 5705
BmgI	1	1425	GdIII	5	524 656 1890 2284 5101			
BpmI	6	1054 1543 2177 2731 3347 4783	HaeI	8	944 2265 2337 2394 2791 3835 3846 4298	UbaII	26	
			HaeII	13		VspI	4	477 1901 1960 4885
Bpu10I	1	2926	HaeIII	28		XbaI	1	428
Bpu1102I	1	267	Hgal	15		XcmI	3	1072 1588 1606
BsaI	1	4774	HgiEII	2	814 4406	XhoI	1	324
BsaAI	1	3572	HhaI	45		XmnI	2	3378 5312
BsaBI	3	493 499 3017	Hin4I	5	16 1115 2486 4712 4786			
BsaHI	8	539 560 674 1173 1856 2551 5250 5632	HincII	2	1722 5254			
			HindIII	1	29			
BsaJI	11		Hinfl	14				
BsaWI	7	189 1535 2038 3009 4026 4173 5004	HpaI	1	1722			
			HphI	17				
BsaXI	1	1875	Maell	12				
Bsbl	2	3536 5256	MaeIII	18				
BscGI	13		MbolI	15				
BsgI	3	1067 1267 2980	MluI	1	1216			
Bsil	3	3993 5377 5684	MmeI	2	4035 4219			
BsiEI	6	2001 2287 3736 4160 5083 5232	MnlI	34				
			MscI	1	2791			
BsII	22		MseI	24				
BsmI	1	2704	MslI	10	1268 1556 1586 2376 2807 3002 3393 4965 5124 5483			
BsmAI	7	913 1318 1444 1831 3461 4774 5550	MspI	35				
			MspAII	11				
BsmBI	2	1831 3461	Mwol	44				
BsmFI	4	677 2218 2443 3091	NarI	5	539 560 674 1856 2551			
BsoFI	57		NciI	14				
Bsp24I	12		NcoI	1	389			
Bsp1286I	11		NdeI	1	331			
BspEI	2	189 3009	NgoAIV	4	526 2114 2274 2628			
BspGI	3	2404 2481 3346	NlaIII	31				
BspLU11I	1	3820	NlaIV	29				
BspMI	1	2399	NruI	1	2319			
BsrI	25		NspI	4	691 3165 3457 3824			
BsrBI	3	449 3753 5554	Pfi1108I	2	2103 4731			
BsrDI	4	1263 1629 4774 4948	PfIMI	3	798 2666 2715			
BsrFI	8	160 526 535 902 2114 2274 2628 4793						

Enzymes that do not cut pET-15b:

AflIII	AgeI	AscI	AvrII	BaeI
BseRI	BsrGI	Bsu36I	DraIII	FseI
KpnI	MunI	NheI	NotI	NsiI
NspV	Pacl	PmeI	PmlI	RleAI
RsrII	SacI	SacII	Sall	SexAI
SfiI	Sgfl	SmaI	SnaBI	SpeI
SrfI	Sse8387I	StuI	SunI	Swal