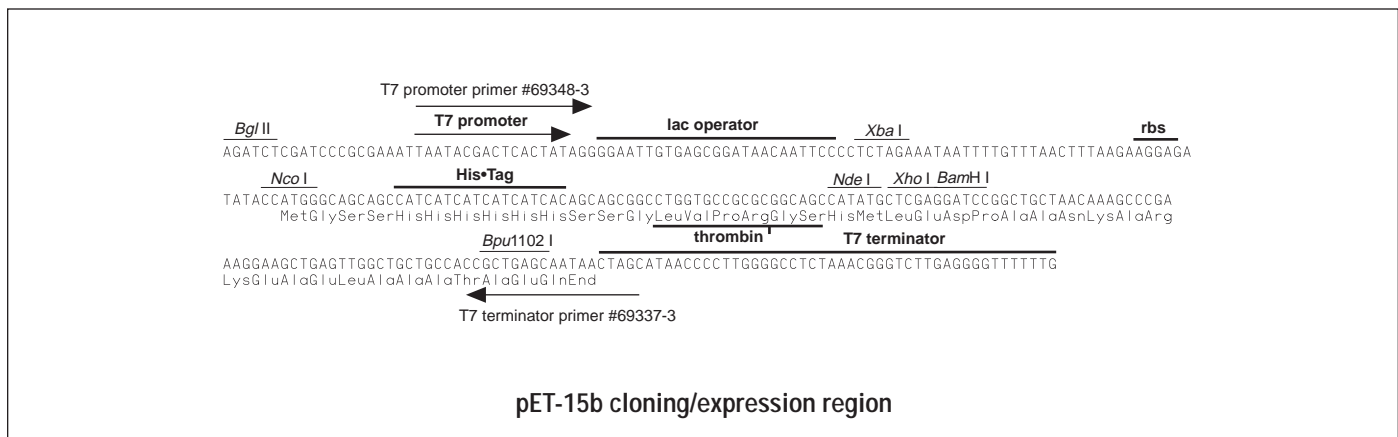
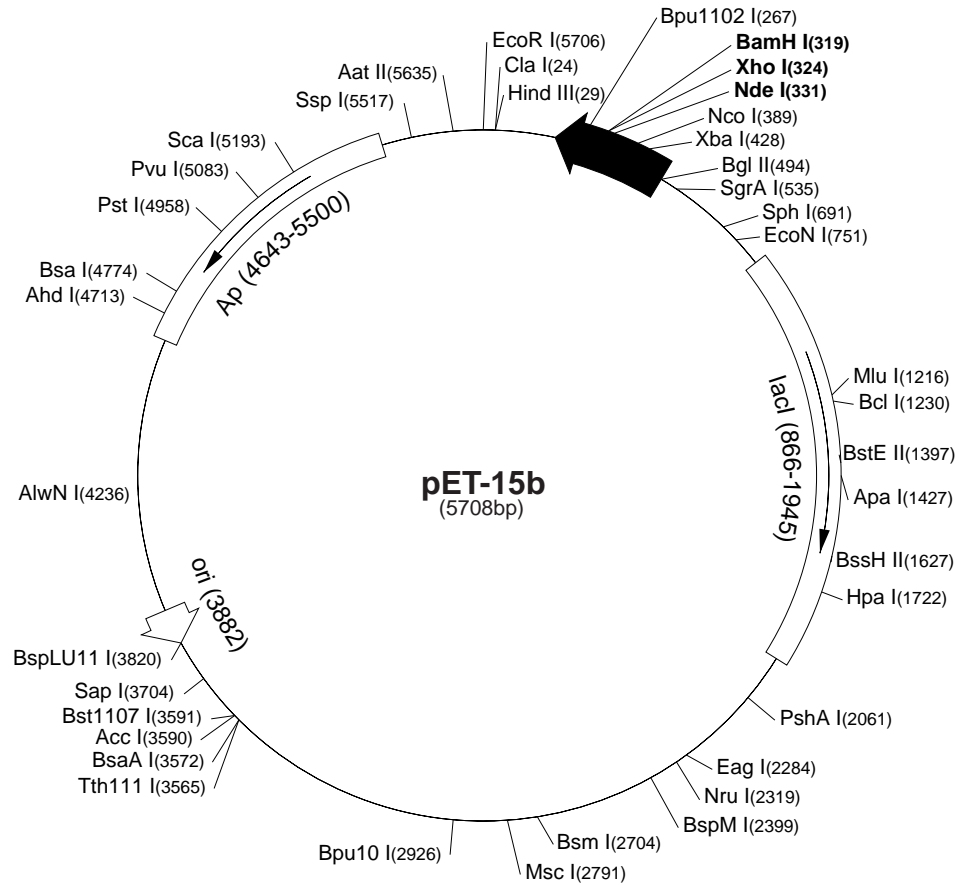


# pET-15b Vector

The pET-15b vector (Cat. No. 69661-3) carries an N-terminal His•Tag<sup>®</sup> 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	463-479
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		
AccII	7	983 1711 2042 3329 3470	BstEII	1	1397	PshAI	1	2061		
		3772 5012	BstXI	3	1018 1147 1270	Psp5II	2	2784 2826		
AcII	91		BstYI	11		Psp1406I	5	878 2246 3145 4939 5312		
AflIII	2	1216 3820	Cac8I	41		PstI	1	4958		
AluI	24		CjeI	25		PvuI	1	5083		
AlwI	16		CjePI	26		PvuII	3	1816 1909 3411		
Alw21I	8	716 1200 2523 2814 3638	Clal	1	24	RcaI	4	614 4540 5548 5653		
		4138 5299 5384	CviJI	97		RsaI	4	165 1363 3626 5193		
Alw44I	4	1196 3634 4134 5380	CviRI	26		SapI	1	3704		
AlwNI	1	4236	Ddel	11		Sau96I	21			
ApaI	1	1427	Dpnl	29		Sau3AI	29			
ApaBI	2	900 2397	DraI	3	4579 4598 5290	Scal	1	5193		
ApoI	2	1491 5706	DrdI	2	3513 3928	ScrFI	25			
AvaI	2	324 2770	DrdII	1	939	SfaNI	24			
Avall	9	1768 2144 2232 2481 2784	Dsal	3	389 653 2792	Sfcl	5	138 462 4085 4276 4954		
		2826 3105 4851 5073	EaeI	6	524 656 1890 2284 2789	SgrAI	1	535		
BamHI	1	319			5101	SphI	1	691		
BanI	13		EagI	1	2284	SspI	1	5517		
BanII	3	600 614 1427	Eam1105I	1	4713	StyI	3	244 389 2714		
BbsI	5	1362 1701 2075 2938 5691	EarI	3	834 3704 5508	TaqI	13			
BbvI	31		Ecil	5	993 2740 3894 4040 4868	TaqII	8	1124 1342 2015 3722 5061		
BccI	16		Eco47III	3	621 2122 3074	5246	5399	5416		
Bce83I	7	208 2030 2200 3911 4209	Eco57I	2	4368 5380	TfiI	7	1895 2197 2351 2649 2870		
		4450 5318	EcoNI	1	751			3374 3795		
Bcefl	5	735 1076 1703 2512 4322	EcoO109I	5	240 649 2784 2826 5689	Thal	41			
Bcgl	8	1508 1542 2042 2076 3397	EcoRI	1	5706	Tsel	31			
3431	5218	5252	EcoRII	11		Tsp45I	9	124 1397 2225 2492 3259		
BclI	1	1230	EcoRV	2	187 1666			3472 3567 4969 5180		
Bfal	6	257 429 2834 4315 4568	FauI	18		Tsp509I	16			
		4903	FokI	14		Tth111I	1	3565		
BglI	3	2280 2514 4833	FspI	3	2703 2801 4935	Tth111II	7	1055 1748 3281 4410 4417		
BglII	1	494	GdIII	5	524 656 1890 2284 5101			4449 5705		
BmgI	1	1425	HaeI	8	944 2265 2337 2394 2791	UbaII	26			
BpmI	6	1054 1543 2177 2731 3347			3835 3846 4298	VspI	4	477 1901 1960 4885		
		4783	HaeII	13		XbaI	1	428		
Bpu10I	1	2926	HaeIII	28		XcmI	3	1072 1588 1606		
Bpu1102I	1	267	HgaI	15		XhoI	1	324		
BsaI	1	4774	HgiEII	2	814 4406	XmnI	2	3378 5312		
BsaAI	1	3572	HhaI	45						
BsaBI	3	493 499 3017	Hin4I	5	16 1115 2486 4712 4786	Enzymes that do not cut pET-15b:				
BsaHI	8	539 560 674 1173 1856	HincII	2	1722 5254	AflII	Agel	AscI	AvrII	BaeI
		2551 5250 5632	HindIII	1	29	BseRI	BsrGI	Bsu36I	DraIII	FseI
BsaJI	11		Hinfl	14		KpnI	MunI	NheI	NotI	NsiI
BsaWI	7	189 1535 2038 3009 4026	HpaI	1	1722	NspV	Pacl	PmeI	PmlI	RleAI
		4173 5004	HphI	17		RsrII	Sacl	SacII	Sall	SexAI
BsaXI	1	1875	Maell	12		Sfil	Sgfl	SmaI	SnaBI	SpeI
Bsbl	2	3536 5256	MaellI	18		SrfI	Sse8387I	StuI	SunI	Swal
BscGI	13		Mboll	15						
BsgI	3	1067 1267 2980	Mlul	1	1216					
Bsil	3	3993 5377 5684	Mmel	2	4035 4219					
BsiEI	6	2001 2287 3736 4160 5083	MnlI	34						
		5232	MscI	1	2791					
BsII	22		Msel	24						
BsmI	1	2704	MslI	10	1268 1556 1586 2376 2807					
BsmAI	7	913 1318 1444 1831 3461			3002 3393 4965 5124 5483					
		4774 5550	MspI	35						
BsmBI	2	1831 3461	MspAII	11						
BsmFI	4	677 2218 2443 3091	Mwol	44						
BsoFI	57		NarI	5	539 560 674 1856 2551					
Bsp24I	12		NciI	14						
Bsp1286I	11		NcoI	1	389					
BspEI	2	189 3009	NdeI	1	331					
BspGI	3	2404 2481 3346	NgoAIV	4	526 2114 2274 2628					
BspLU11I	1	3820	NlaIII	31						
BspMI	1	2399	NlaIV	29						
BsrI	25		NruI	1	2319					
BsrBI	3	449 3753 5554	NspI	4	691 3165 3457 3824					
BsrDI	4	1263 1629 4774 4948	Pfi1108I	2	2103 4731					
BsrFI	8	160 526 535 902 2114	PfiMI	3	798 2666 2715					
		2274 2628 4793								