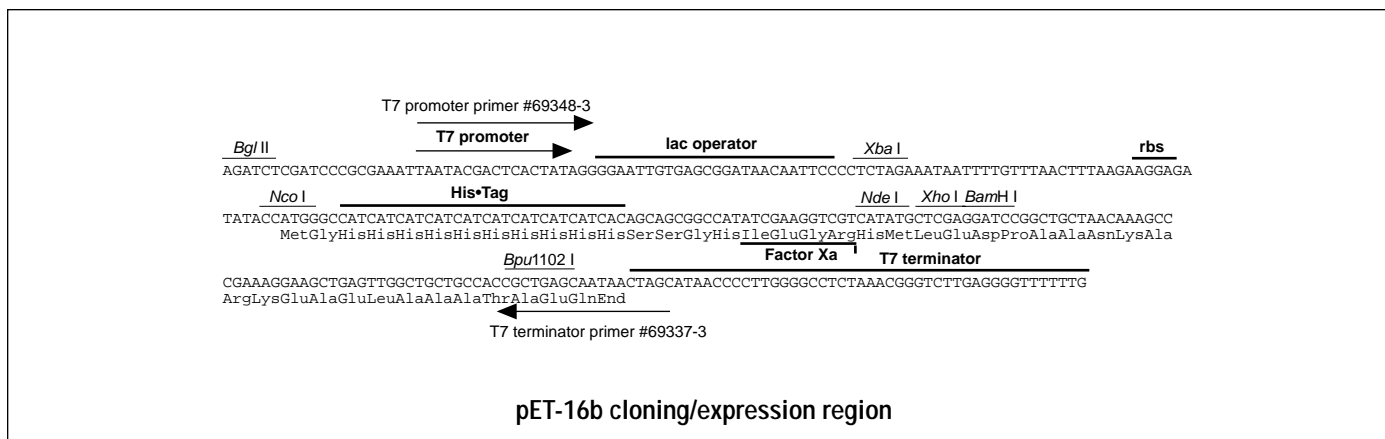
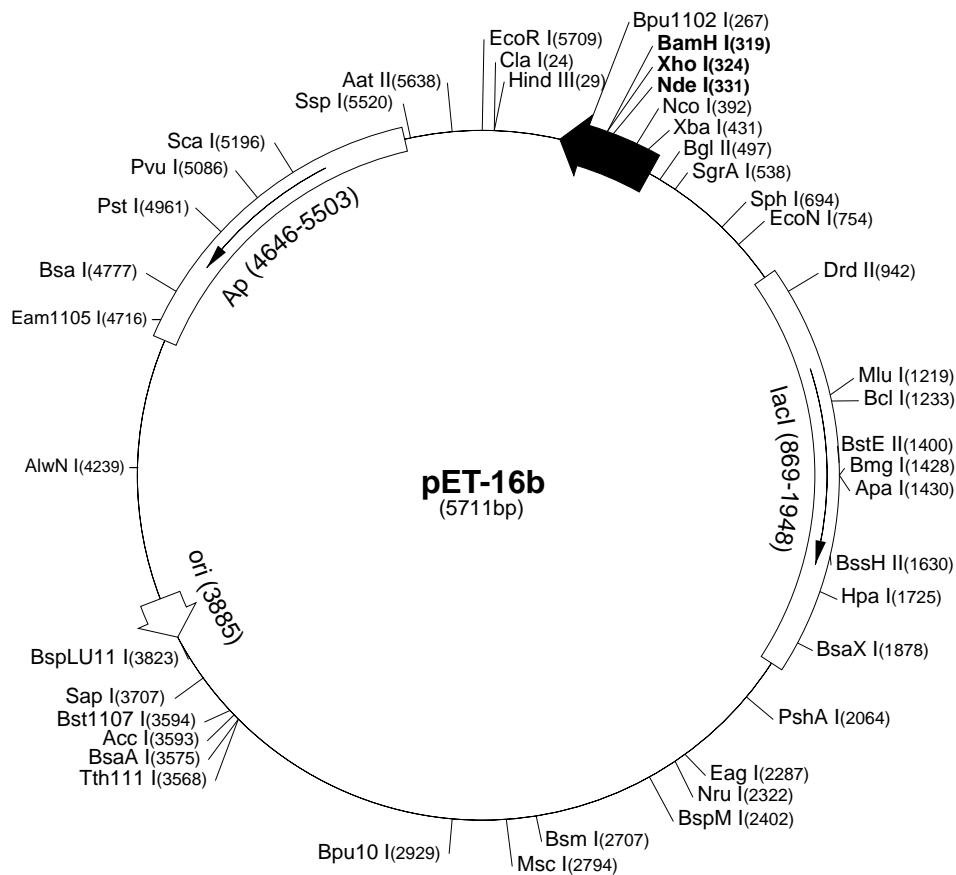


The pET-16b vector (Cat. No. 69662-3) carries an N-terminal His•Tag[®] sequence followed by a Factor Xa site and three cloning sites. Unique sites are shown on the circle map. Note that the sequence is numbered by the pBR322 convention, so the T7 expression region is reversed on the circular map. The cloning/expression region of the coding strand transcribed by T7 RNA polymerase is shown below.

pET-16b sequence landmarks

T7 promoter	466-482
T7 transcription start	465
His•Tag coding sequence	360-389
Multiple cloning sites (<i>Nde</i> I - <i>Bam</i> H I)	319-335
T7 terminator	213-259
<i>lac</i> I coding sequence	869-1948
pBR322 origin	3885
<i>bla</i> coding sequence	4646-5503



pET-16b Restriction Sites

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations		
AatII	1	5638	BssHII	1	1630	PfiMI	3	801 2669 2718		
AccI	1	3593	Bst1107I	1	3594	PleI	7	480 768 855 1651 3717		
AccIII	7	986 1714 2045 3332 3473 3775 5015	BstEII	1	1400			4202 4705		
AcII	89		BstXI	3	1021 1150 1273	PshAI	1	2064		
AfiIII	2	1219 3823	BstYI	11		Psp5II	2	2787 2829		
AluI	24		Cac8I	41		Psp1406I	5	881 2249 3148 4942 5315		
AlwI	16		CjeI	26		PstI	1	4961		
Alw21I	8	719 1203 2526 2817 3641 4141 5302 5387	CjePI	28		PvuI	1	5086		
			Clal	1	24	PvuII	3	1819 1912 3414		
Alw44I	4	1199 3637 4137 5383	CviJI	96		RcaI	4	617 4543 5551 5656		
AlwNI	1	4239	CviRI	26		RsaI	4	165 1366 3629 5196		
ApaI	1	1430	DdeI	11		SapI	1	3707		
ApaBI	2	903 2400	DpnI	29		Sau96I	22			
ApoI	2	1494 5709	DraI	3	4582 4601 5293	Sau3AI	37			
AvaI	2	324 2773	DrdI	2	3516 3931	Scal	1	5196		
Avall	9	1771 2147 2235 2484 2787 2829 3108 4854 5076	DrdII	1	942	ScrFI	24			
			Dsal	3	392 656 2795	SfaNI	24			
BamHI	1	319	EaeI	7	349 527 659 1893 2287 2792 5104	Sfcl	5	138 465 4088 4279 4957		
BanI	12		EagI	1	2287	SgrAI	1	538		
BanII	3	603 617 1430	Eam1105I	1	4716	SphI	1	694		
BbsI	5	1365 1704 2078 2941 5694	EarI	3	837 3707 5511	SspI	1	5520		
BbvI	28		Ecil	5	996 2743 3897 4043 4871	StyI	3	244 392 2717		
BccI	16		Eco47III	3	624 2125 3077	TaqI	14			
Bce83I	7	208 2033 2203 3914 4212 4453 5321	Eco57I	2	4371 5383	TaqII	8	1127 1345 2018 3725 5064 5249 5402 5419		
Bcefl	5	738 1079 1706 2515 4325	EcoNI	1	754	TfiI	7	1898 2200 2354 2652 2873 3377 3798		
Bcgl	8	1511 1545 2045 2079 3400 3434 5221 5255	EcoO109I	5	240 652 2787 2829 5692	Thal	39			
BclI	1	1233	EcoRI	1	5709	Tsel	28			
Bfal	6	257 432 2837 4318 4571 4906	EcoRII	10	129 942 1257 1797 1854 2406 2789 3849 3970 3983	Tsp45I	9	124 1400 2228 2495 3262 3475 3570 4972 5183		
BglI	3	2283 2517 4836	EcoRV	2	187 1669	Tsp509I	16			
BglII	1	497	FauI	18		Tth111I	1	3568		
BmgI	1	1428	FokI	14		Tth111II	7	1058 1751 3284 4413 4420 4452 5708		
BpmI	6	1057 1546 2180 2734 3350 4786	Fspl	3	2706 2804 4938	UbaII	24			
			GdIII	6	349 527 659 1893 2287 5104	VspI	4	480 1904 1963 4888		
Bpu10I	1	2929	HaeI	8	947 2268 2340 2397 2794 3838 3849 4301	XbaI	1	431		
Bpu1102I	1	267	HaeII	13		XcmI	3	1075 1591 1609		
BsaI	1	4777	HaeIII	29		XhoI	1	324		
BsaAI	1	3575	HgaI	15		XmnI	2	3381 5315		
BsaBI	3	496 502 3020	HgiEII	2	817 4409					
BsaHI	8	542 563 677 1176 1859 2554 5253 5635	HhaI	44		Enzymes that do not cut pET-16b:				
BsaJI	11		Hin4I	5	16 1118 2489 4715 4789	AfII	Agel	AscI	AvrII	BaeI
BsaWI	7	189 1538 2041 3012 4029 4176 5007	HincII	2	1725 5257	BseRI	BsrGI	Bsu36I	DraIII	FseI
			HindIII	1	29	KpnI	MunI	NheI	NotI	NsiI
BsaXI	1	1878	Hinfl	14		NspV	Pacl	PmeI	PmlI	RleAI
Bsbl	2	3539 5259	Hpal	1	1725	RsrII	Sacl	SacII	Sall	SexAI
BscGI	13		HphI	17		Sfil	Sgfl	Smal	SnaBI	SpeI
BsgI	3	1070 1270 2983	Maell	12		SrfI	Sse8387I	Stul	SunI	Swal
Bsil	3	3996 5380 5687	MaeIII	18						
BsiEI	6	2004 2290 3739 4163 5086 5235	MbolI	15						
			MluI	1	1219					
BsII	22		MmeI	2	4038 4222					
BsmI	1	2707	MnlI	34						
BsmAI	7	916 1321 1447 1834 3464 4777 5553	MscI	1	2794					
			MseI	24						
BsmBI	2	1834 3464	MslI	10	1271 1559 1589 2379 2810 3005 3396 4968 5127 5486					
BsmFI	4	680 2221 2446 3094								
BsoFI	52		MspI	35						
Bsp24I	12		MspAII	11						
Bsp1286I	11		Mwol	44						
BspEI	2	189 3012	NarI	5	542 563 677 1859 2554					
BspGI	3	2407 2484 3349	NciI	14						
BspLU11I	1	3823	NcoI	1	392					
BspMI	1	2402	NdeI	1	331					
BsrI	25		NgoAIV	4	529 2117 2277 2631					
BsrBI	3	452 3756 5557	NlaIII	31						
BsrDI	4	1266 1632 4777 4951	NlaIV	28						
BsrFI	8	160 529 538 905 2117 2277 2631 4796	NruI	1	2322					
			NspI	4	694 3168 3460 3827					
			Pfi1108I	2	2106 4734					