

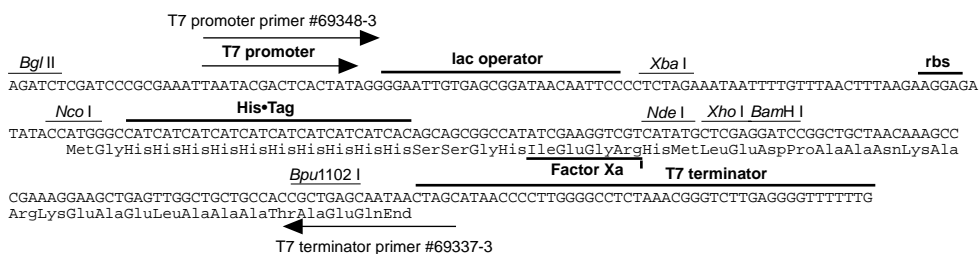
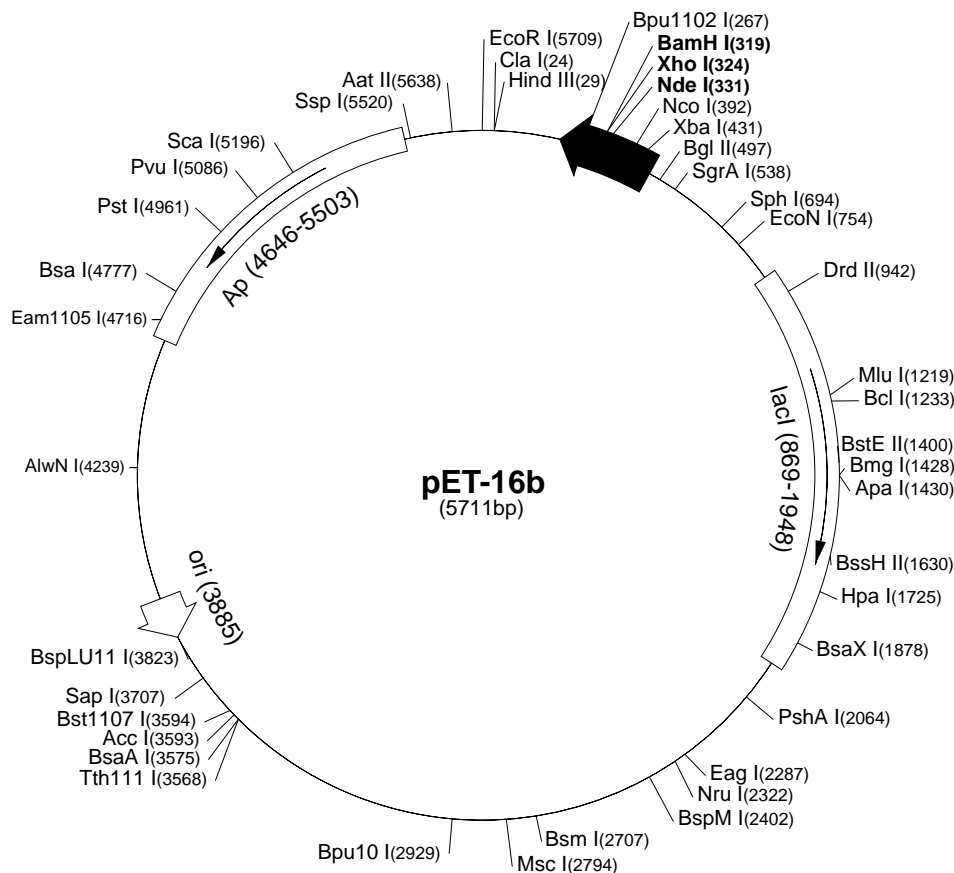
pET-16b Vector

TB046 2/00

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 cloning/expression region

pET-16b Restriction Sites

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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			
AccII	7	986	1714	2045	3332	3473	BstEII	1	1400							4202	4705						
		3775	5015				BstXI	3	1021	1150	1273												
Acil	89						BstYI	11						PshAI	1	2064							
AflIII	2	1219	3823				Cac8I	41						Psp5II	2	2787	2829						
Alul	24						CjeI	26						Psp1406I	5	881	2249	3148	4942	5315			
AlwI	16						CjePI	28						PstI	1	4961							
Alw21I	8	719	1203	2526	2817	3641	Clal	1	24					PvuI	1	5086							
		4141	5302	5387			CviJI	96						PvuII	3	1819	1912	3414					
Alw44I	4	1199	3637	4137	5383		CviRI	26						RcaI	4	617	4543	5551	5656				
AlwNI	1	4239					DdeI	11						Rsal	4	165	1366	3629	5196				
ApaI	1	1430					DpnI	29						SapI	1	3707							
ApaBI	2	903	2400				DraI	3	4582	4601	5293		Sau96I	22									
ApoI	2	1494	5709				DrdI	2	3516	3931			Sau3AI	37									
AvaI	2	324	2773				DrdII	1	942					Scal	1	5196							
Avall	9	1771	2147	2235	2484	2787	DsaI	3	392	656	2795		ScrFI	24									
		2829	3108	4854	5076		EaeI	7	349	527	659	1893	2287	SfaNI	24								
		319							2792	5104			Sfcl	5	138	465	4088	4279	4957				
BamHI	1						EagI	1	2287					SgrAI	1	538							
BanI	12						Eam1105I	1	4716					SphI	1	694							
BanII	3	603	617	1430			EarI	3	837	3707	5511		Sspl	1	5520								
BbsI	5	1365	1704	2078	2941	5694	Ecil	5	996	2743	3897	4043	4871	Styl	3	244	392	2717					
BbvI	28						Eco47III	3	624	2125	3077		TaqI	14									
Bccl	16						Eco57I	2	4371	5383			TaqII	8	1127	1345	2018	3725	5064				
Bce83I	7	208	2033	2203	3914	4212	EcoNI	1	754							5249	5402	5419					
		4453	5321				EcoO109I	5	240	652	2787	2829	5692	TfiI	7	1898	2200	2354	2652	2873			
Bcefl	5	738	1079	1706	2515	4325	EcoRI	1	5709							3377	3798						
Bcgl	8	1511	1545	2045	2079	3400	EcoRII	10	129	942	1257	1797	1854	Thal	39								
		3434	5221	5255					2406	2789	3849	3970	3983	TseI	28								
BclI	1	1233						EcoRV	2	187					1669	Tsp45I	9	124	1400	2228	2495	3262	
Bfal	6	257	432	2837	4318	4571	FauI	18								3475	3570	4972	5183				
		4906						FokI	14														
BglI	3	2283	2517	4836			FspI	3	2706	2804	4938			Tsp509I	16								
BglII	1	497					GdIII	6	349	527	659	1893	2287	Tth111I	1	3568							
BmgI	1	1428							5104								Tth111II	7	1058	1751	3284	4413	4420
Bpml	6	1057	1546	2180	2734	3350	HaeI	8	947	2268	2340	2397	2794			4452	5708						
		4786								3838	3849	4301			UbaII	24							
Bpu10I	1	2929					HaeII	13								VspI	4	480	1904	1963	4888		
Bpu1102I	1	267					HaeIII	29								XbaI	1	431					
Bsal	1	4777					HgaI	15								XcmI	3	1075	1591	1609			
BsaAI	1	3575					HgiEII	2	817			4409				XhoI	1	324					
BsaBI	3	496	502	3020			HhaI	44								XmnI	2	3381					5315
BsaHI	8	542	563	677	1176	1859	Hin4I	5	16	1118	2489	4715	4789	Enzymes that do not cut pET-16b:									
		2554	5253	5635			HincII	2	1725	5257				AflII	Agel	AscI	AvrII	BaeI					
BsaJI	11						HindIII	1	29							BseRI	BsrGI	Bsu36I	DraIII	FseI			
BsaWI	7	189	1538	2041	3012	4029	Hinfl	14								KpnI	MunI	NheI	NotI	NsiI			
		4176	5007				Hpal	1	1725							NspV	PacI	PmeI	PmlI	RleAI			
BsaXI	1	1878					HphI	17								RsrII	SacI	SacII	Sall	SexAI			
Bsbl	2	3539	5259				Maell	12								SfiI	Sgfi	Smal	SnaBI	SpeI			
BscGI	13						MaellI	18								SrfI	Sse8387I	Stul	SunI	Swal			
BsgI	3	1070	1270	2983			MbolI	15															
Bsil	3	3996	5380	5687			MluI	1	1219														
BsiEI	6	2004	2290	3739	4163	5086	Mmel	2	4038	4222													
		5235					MnlI	34															
BsII	22						MscI	1	2794														
BsmI	1	2707					MseI	24															
BsmAI	7	916	1321	1447	1834	3464	MslI	10	1271	1559	1589	2379	2810										
		4777	5553						3005	3396	4968	5127	5486										
BsmBI	2	1834	3464				MspI	35															
BsmFI	4	680	2221	2446	3094		MspA1I	11															
BsoFI	52						Mwol	44															
Bsp24I	12						NarI	5	542	563	677	1859	2554										
Bsp1286I	11						NciI	14															
BspEI	2	189	3012				NcoI	1	392														
BspGI	3	2407	2484	3349			NdeI	1	331														
BspLU11I	1	3823					NgoAIV	4	529	2117	2277	2631											
BspMI	1	2402					NlaIII	31															
Bsrl	25						NlaIV	28															
BsrBI	3	452	3756	5557			NruI	1	2322														
BsrDI	4	1266	1632	4777	4951		Nspl	4	694	3168	3460	3827											
BsrFI	8	160	529	538	905	2117	Pfi1108I	2	2106	4734													
		2277	2631	4796																			