

pET-9b



Location: Expresión 04

Resistance: Kanamycin 25 µg/mL

General description of pET-9 a-d(+) vectors:

The pET-9a-d(+) vectors carry an N-terminal T7•Tag[®] sequence and *Bam*H I cloning site. These vectors are the precursors to many pET family vectors. Unique sites are shown on the circle map (Figure 2).

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 (Figure 3) of the coding strand transcribed by T7 RNA polymerase is shown below.

The map for pET-9b is the same as pET-9a (shown in Figure 2) with the exception of pET-9b is a 4340 bp plasmid with 1 bp subtracted from each site beyond BamHI at 510.

Complete sequence:

https://www.lablife.org/g?a=seqa&id=vdb_g2.l19_Zz8GxKdx.eoTrAb01xrRwS0-sequence_20b0e5a1e2231db55be0e53eda9ce901eff1e07a_10

Genotype of *E coli* strain BL21(DE3) pLysS : F⁻ *ompT hsdS*(rB⁻ mB⁻) *gal dcm* λ(DE3) pLysS (Camr)(λ(DE3): *lacI, lacUV5-T7 gene 1, ind1, sam7, nin5*)

Landmarks and maps

pET-9a sequence landmarks	
T7 promoter	615-631
T7 transcription start	614
T7•Tag coding sequence	519-551
T7 terminator	404-450
pBR322 origin	2814
kan coding sequence	3523-4335

Figure 1: Landmarks

pET-9b

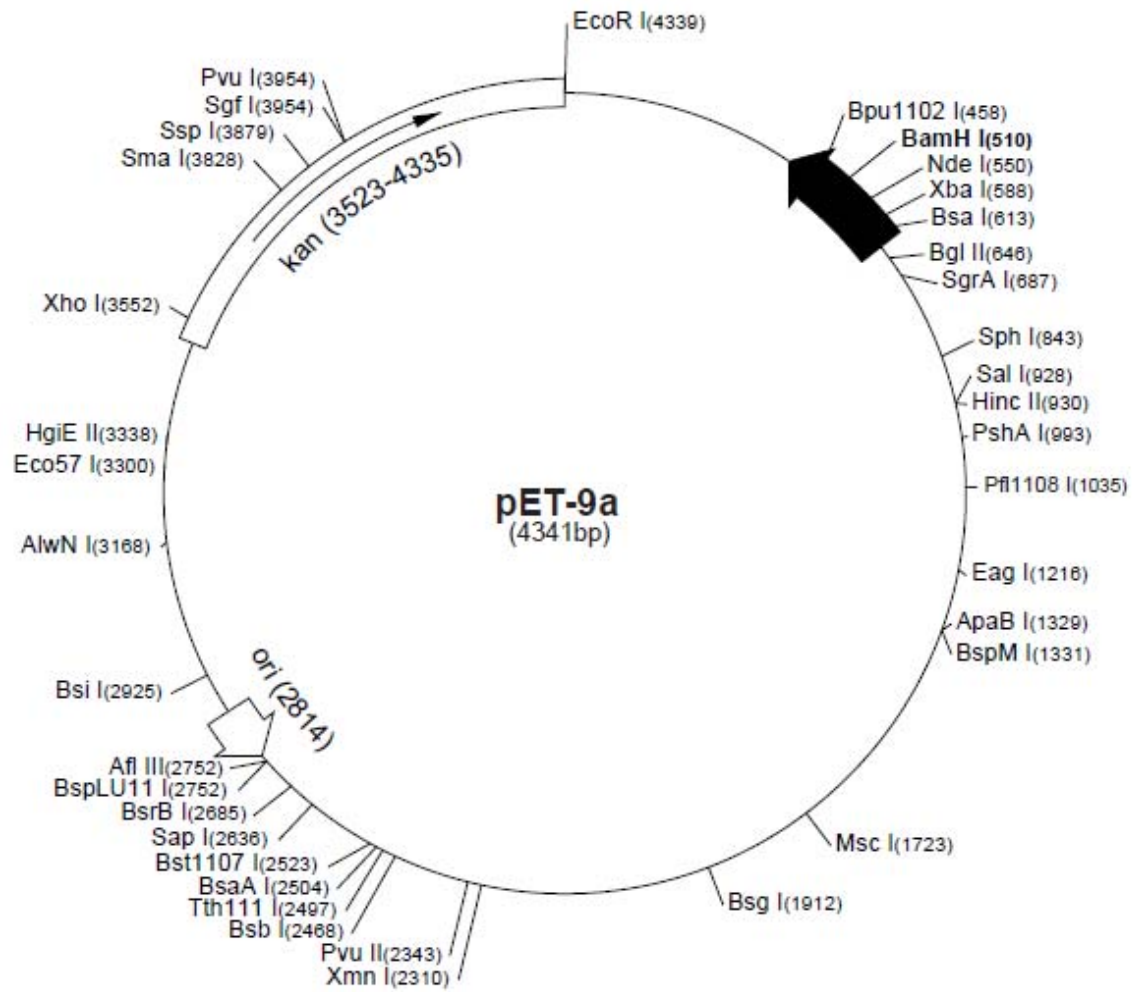
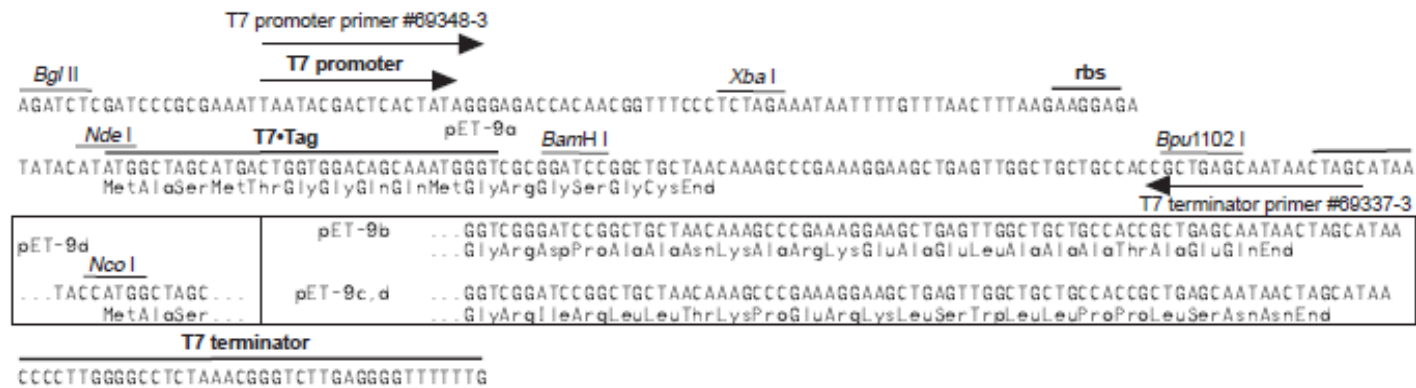


Figure 2: Plasmid circle map

pET-9b



pET-9a-d cloning/expression region

Figure 3: Cloning Region

pET-9b

pET-9a Restriction Sites

TB040

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations
AccI	2	929 2522	Clai	2	24 3645	RsaI	3	165 2558 3789
AccIII	4	974 2261 2402 2704	CviJI	76		Sall	1	928
Acil	61		CviRI	19		SapI	1	2636
AflIII	1	2752	DdeI	9	458 479 1858 2020 2560	Sau96I	11	
AluI	16				3027 3436 3971 4335	Sau3AI	19	
AlwI	11		DpnI	19		ScrFI	18	
Alw21I	6	280 868 1455 1746 2570	DrdI	2	2445 2860	SfaNI	25	
		3070	DsaI	2	805 1724	Sfcl	4	138 614 3017 3208
Alw44I	2	2566 3066	EaeI	5	295 676 808 1216 1721	SgfI	1	3954
AlwNI	1	3168	EagI	1	1216	SgrAI	1	687
ApaBI	1	1329	EarI	2	2636 3767	SmaI	1	3828
ApoI	3	3567 3751 4339	Ecil	3	1672 2826 2972	SphI	1	843
AvaI	3	1702 3552 3826	Eco47III	4	234 773 1054 2006	SspI	1	3879
Avall	6	1076 1164 1413 1716 1758	Eco57I	1	3300	StyI	2	435 1646
		2037	EcoNI	2	903 3866	TaqI	12	
BamHI	1	510	EcoO109I	4	431 801 1716 1758	TaqII	3	947 2654 4208
BanI	8	76 119 690 711 825	EcoRI	1	4339	TfiI	10	1129 1283 1581 1802 2727 3865 3921 4093 4
		1043 1482 1566	EcoRII	8	129 1335 1718 2778 2899	ThaI	25	
BanII	3	752 766 3609			2912 3842 4199	TseI	21	
BbsI	2	1007 1870	EcoRV	2	187 378	Tsp45I	8	124 212 1157 1424 2404 2499 4101
BbvI	21		FauI	11				
BccI	9	737 830 1267 1356 1663	FokI	11				
		1675 3728 3771 4212	FspI	3	262 1635 1733			
Bce83I	6	399 962 1132 2843 3141	GdiII	4	295 676 808 1216	Tsp509I	12	
		3382	HaeI	8	1197 1269 1326 1723 2767	Tth111I	1	2497
BceII	4	887 1444 3254 4273	HaeII	11	2778 3230 4041	Tth111II	7	2213 3342 3349 3381 3917 4338
BcgI	6	506 540 974 1008 2329	HaeIII	21				
		2363	Hgal	10	676 915 1230 1262 1506	UbaI	19	
Bfal	6	230 448 544 589 1766			1656 2288 2445 2863 3441	VspI	2	629 4153
		3247	HgiEII	1	3338	XbaI	1	588
BglI	2	1212 1446	HhaI	31		XhoI	1	3552
BglII	1	646	HinAI	5	16 334 1418 3640 4182	XmnI	1	2310
BpmI	3	1109 1663 2279	HincII	1	930			
Bpu10I	2	1858 3971	HindIII	2	29 4072			
Bpu1102I	1	458	HinfI	15				
BsaI	1	613	HphI	12				
BsaAI	1	2504	Maell	8	1178 1234 1823 1847 2077			
BsaBI	3	645 651 1949			2503 3455 3544			
BsaHI	4	691 712 826 1483	MaellI	15				
BsaJI	12		MbolI	8	753 1007 1278 1870 2623			
BsaWI	6	380 970 1941 2958 3105			3414 3754 3865			
		4089	MmeI	8	222 309 2967 3151 3596			
Bsbl	1	2468			3790 4152 4161			
BscGI	11		MniI	29				
BsgI	1	1912	MscI	1	1723			
Bsil	1	2925	MseI	13				
BsiEI	6	289 933 1219 2668 3092	MslI	4	1308 1739 1934 2325			
		3954	MspI	26				
BsII	24		MspAI	6	462 1418 2343 2462 3094			
BsmI	3	1636 3838 3915			3339			
BsmAI	3	613 2393 3970	MwoI	38				
BsmBI	2	2393 3970	NarI	4	691 712 826 1483			
BsmFI	4	829 1150 1375 2023	NciI	10	171 812 1536 1762 2090			
BsoFI	40				2396 2431 3132 3827 3828			
Bsp24I	8	513 545 658 690 3245	NdeI	1	550			
		3277 3423 3455	NgoAIV	4	678 1046 1206 1560			
Bsp1286I	9	280 752 766 868 1455	NheI	2	229 543			
		1746 2570 3070 3609	NlaIII	25				
BspEI	2	380 1941	NlaIV	20				
BspGI	3	1336 1413 2278	NruI	2	1251 3611			
BspLU11I	1	2752	NsiI	2	3804 4070			
BspMI	1	1331	NspI	4	843 2097 2389 2756			
BsrI	16		Pfi1108I	1	1035			
BsrBI	1	2685	PfiMI	3	1598 1647 4217			
BsrFI	7	160 678 687 1046 1206	PleI	5	629 917 2646 3131 4186			
		1560 3908	PshAI	1	993			
Bst1107I	1	2523						

Enzymes that do not cut pET-9a:

AatII	AflII	AgeI	Apal	AscI
AvrII	BaeI	BclI	BmgI	BsaXI
BseRI	BsrDI	BsrGI	BssHII	BstEII
BstXI	Bsu36I	DraI	DraIII	DrdII
Eam1105I	FseI	HpaI	KpnI	MluI
MunI	NcoI	NotI	NspV	Pacl
PmeI	PmlI	PstI	RleAI	RsrII
SacI	SacII	Scal	SexAI	SfiI
SnaBI	SpeI	SrfI	Sse8387I	StuI
SunI	Swal	XcmI		