

pET-9a



Location: Expresión 03

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.

Complete sequence:

https://www.lablife.org/g?a=seqa&id=vdb_g2.OhyD6bRjL0R51eky2oTDMSpG5ZE-sequence_c8e79b75594bf9fe89b520f5f8f4e0aa6f676a7d_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-9a

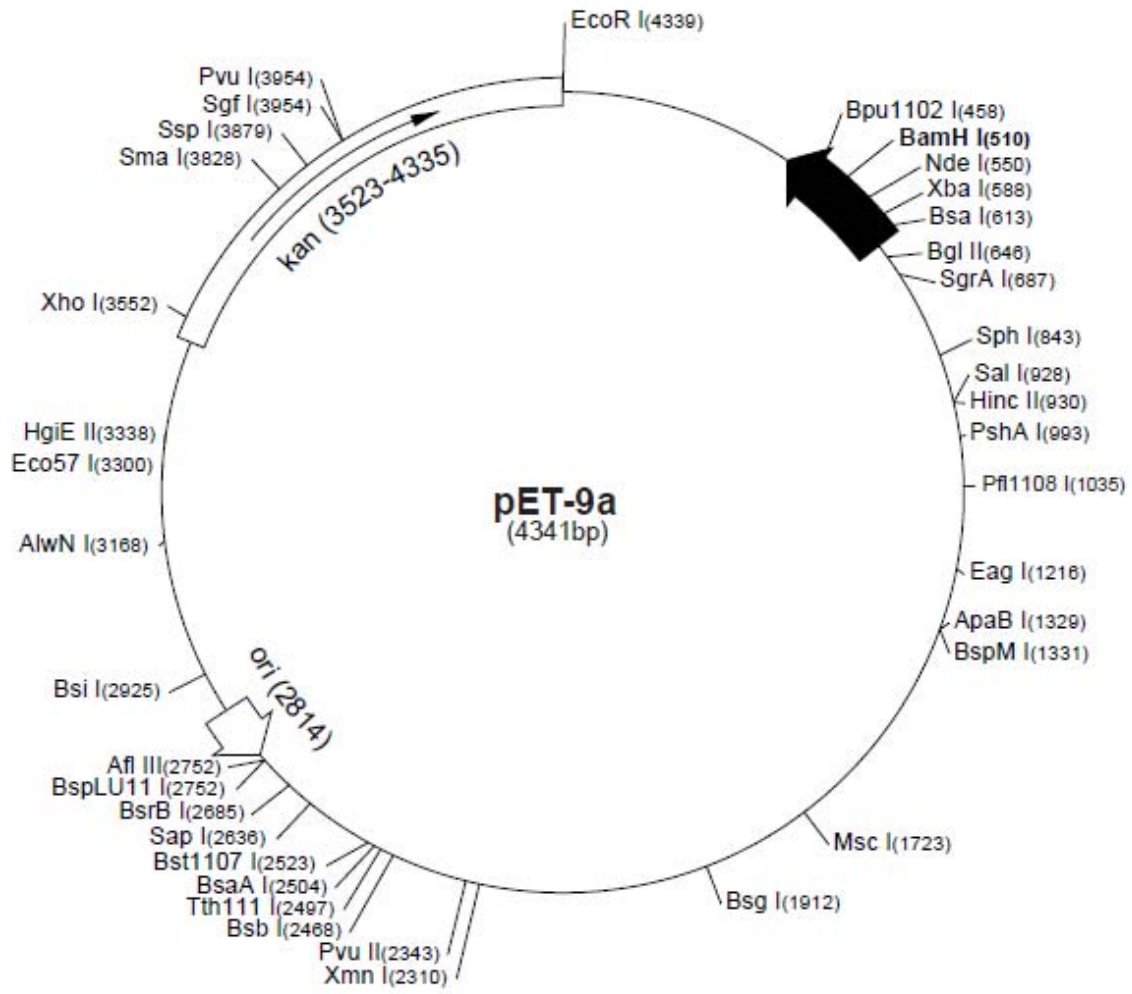
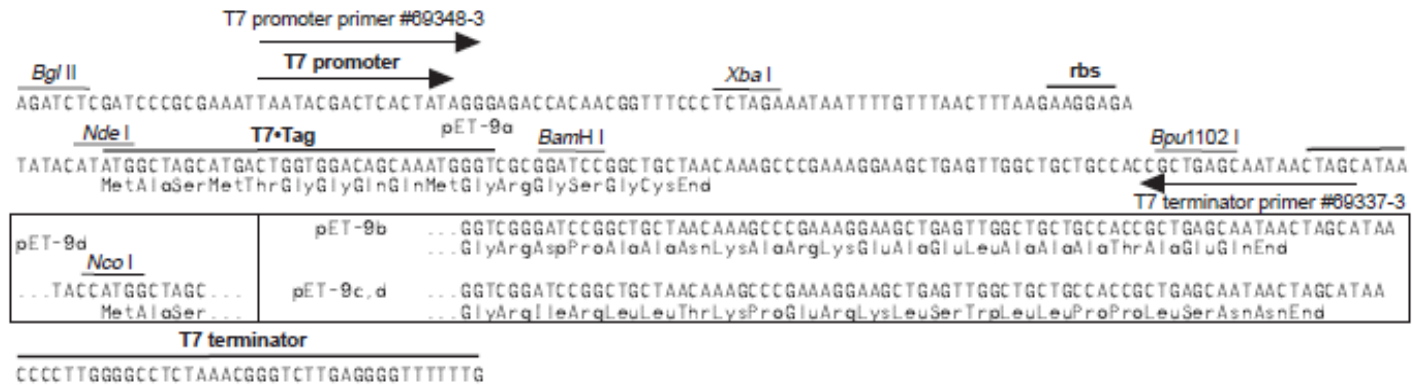


Figure 2: Plasmid circle map

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pET-9a-d cloning/expression region

Figure 3: Cloning Region

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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		
AceIII	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	Sfci	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	Sspl	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					
BanII	3	752 766 3609			2912 3842 4199	ThaI	25			
BbsI	2	1007 1870	EcoRV	2	187 378	TseI	21			
BbvI	21		FauI	11		Tsp45I	8	124 212 1157 1424 2404 2499 4101		
BccI	9	737 830 1267 1356 1663	FokI	11						
		1675 3728 3771 4212	FspI	3	262 1635 1733	Tsp509I	12			
Bce83I	6	399 962 1132 2843 3141	GdiII	4	295 676 808 1216	Tth111I	1	2497		
		3382	HaeI	8	1197 1269 1326 1723 2767	Tth111III	7	2213 3342 3349 3381 3917 4338		
BceII	4	887 1444 3254 4273			2778 3230 4041					
BcgI	6	506 540 974 1008 2329	HaeII	11		UbaII	19			
		2363	HaeIII	21		VspI	2	629 4153		
Bfal	6	230 448 544 589 1766	Hgal	10	676 915 1230 1262 1506	XbaI	1	588		
		3247			1656 2288 2445 2863 3441	XhoI	1	3552		
BglI	2	1212 1446	HgiEII	1	3338	XmnI	1	2310		
BglII	1	646	HhaI	31						
BpmI	3	1109 1663 2279	Hin4I	5	16 334 1418 3640 4182	Enzymes that do not cut pET-9a:				
Bpu10I	2	1858 3971	HincII	1	930	AatII	AflII	AgeI	ApaI	AscI
Bpu1102I	1	458	HindIII	2	29 4072	AvrII	BaeI	BclI	BmgI	BsaXI
BsaI	1	613	HinfI	15		BseRI	BsrDI	BsrGI	BssHII	BstEII
BsaAI	1	2504	HphI	12		BstXI	Bsu36I	DraI	DraIII	DrdII
BsaBI	3	645 651 1949	Maell	8	1178 1234 1823 1847 2077	Eam1105I	FseI	HpaI	KpnI	MluI
BsaHI	4	691 712 826 1483			2503 3455 3544	MunI	NcoI	NotI	NspV	PacI
BsaJI	12		MaellI	15		PmeI	PmlI	PstI	RleAI	RsrII
BsaWI	6	380 970 1941 2958 3105	MbolI	8	753 1007 1278 1870 2623	SacI	SacII	Scal	SexAI	SfiI
		4089			3414 3754 3865	SnaBI	SpeI	SrfI	Sse8387I	StuI
Bsbl	1	2468	MmeI	8	222 309 2967 3151 3596	SunI	Swal	XcmI		
BscGI	11				3790 4152 4161					
BsgI	1	1912	MnlI	29						
Bsil	1	2925	MscI	1	1723					
BsiEI	6	289 933 1219 2668 3092	MseI	13						
		3954	MslI	4	1308 1739 1934 2325					
BsII	24		MspI	26						
BsmI	3	1636 3838 3915	MspATI	6	462 1418 2343 2462 3094					
BsmAI	3	613 2393 3970			3339					
BsmBI	2	2393 3970	MwoI	38						
BsmFI	4	829 1150 1375 2023	NarI	4	691 712 826 1483					
BsoFI	40		NciI	10	171 812 1536 1762 2090					
Bsp24I	8	513 545 658 690 3245			2396 2431 3132 3827 3828					
		3277 3423 3455	NdeI	1	550					
Bsp1286I	9	280 752 766 868 1455	NgoAIV	4	678 1046 1206 1560					
		1746 2570 3070 3609	NheI	2	229 543					
BspEI	2	380 1941	NlaIII	25						
BspGI	3	1336 1413 2278	NlaIV	20						
BspLU11I	1	2752	NruI	2	1251 3611					
BspMI	1	1331	NsiI	2	3804 4070					
BsrI	16		NspI	4	843 2097 2389 2756					
BsrBI	1	2685	Pfi1108I	1	1035					
BsrFI	7	160 678 687 1046 1206	PfIMI	3	1598 1647 4217					
		1560 3908	PleI	5	629 917 2646 3131 4186					
Bst1107I	1	2523	PshAI	1	993					