

pET14b



Location: Expression 15

Resistance: Ampicillin 100 µg/mL

Description :

The pET-14b vector carries an N-terminal His•Tag[®] 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.

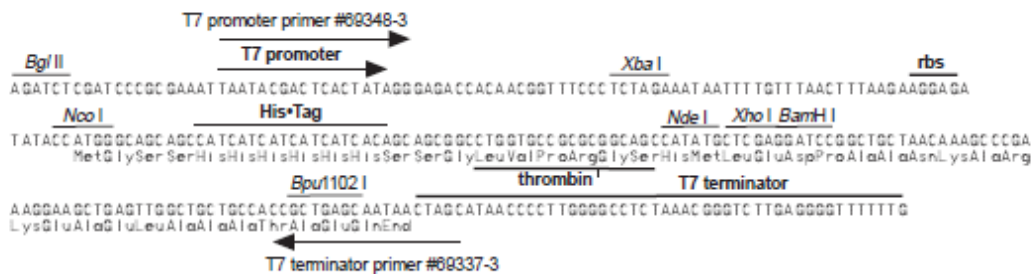
Complete sequence:

https://www.lablife.org/g?a=seqa&id=vdb_g2.AZR28.Rp4Vq.JxSetOvpcgbKAaw_sequence_5eb31ed2eec1533623798ce3ac9a6098285eeaf5_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*)

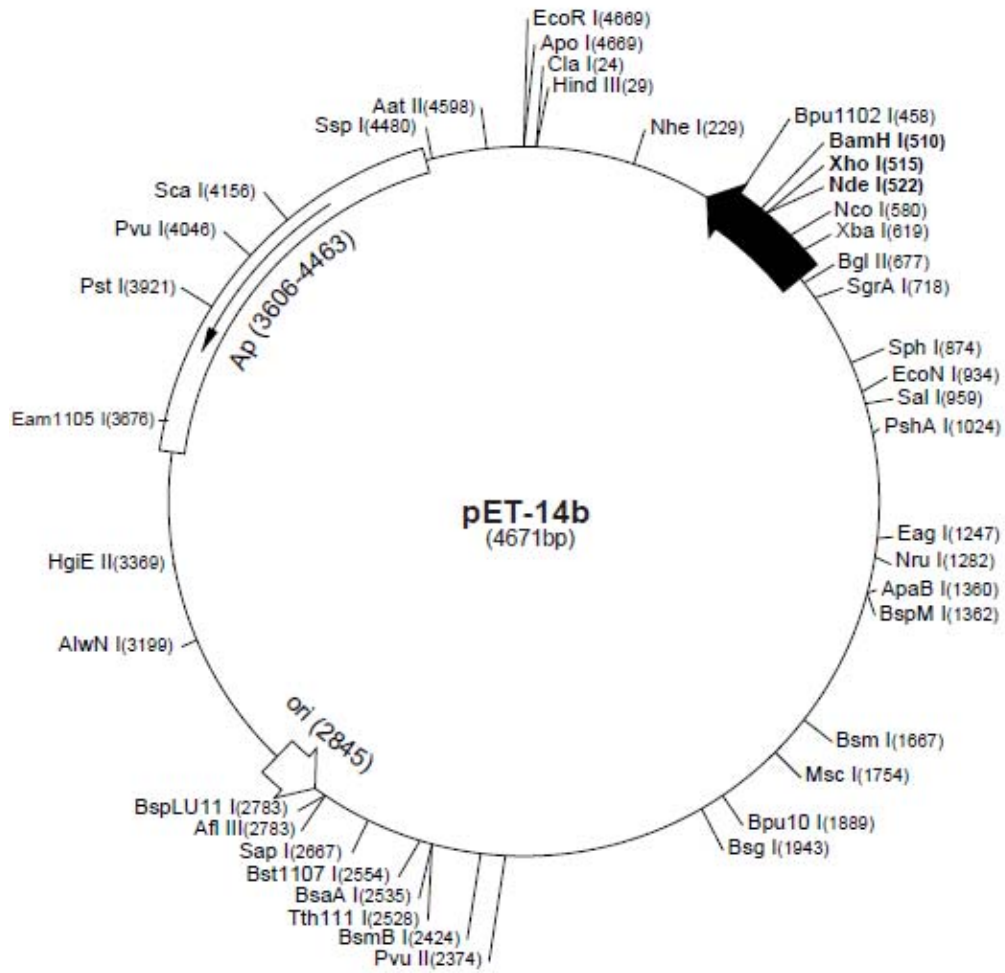
pET-14b sequence landmarks

T7 promoter	646-662
T7 transcription start	645
His•Tag coding sequence	554-571
Multiple cloning sites (<i>Nde</i> I - <i>Bam</i> H I)	510-526
T7 terminator	404-450
pBR322 origin	2845
<i>bla</i> coding sequence	3606-4463



pET-14b cloning/expression region

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pET-14b Restriction Sites

TB044 12

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations			
AatII	1	4598	BstYI	9	510 677 1975 3424 3435	PshAI	1	1024			
AccI	2	960 2553				Psp5II	2	1747 1789			
AceIII	5	1005 2292 2433 2735 3975	CacBI	31	3521 3533 4301 4318	Psp1406I	4	1209 2108 3902 4275			
AcII	72		CjeI	16		PstI	1	3921			
AflIII	1	2783	CjePI	22		PvuI	1	4046			
AluI	18		ClaI	1	24	PvuII	1	2374			
AlwI	14		CviII	81		RcaI	4	797 3503 4511 4616			
Alw21I	8	290 899 1486 1777 2601	CviRI	21		RsaI	3	165 2589 4156			
		3101 4262 4347	DdeI	10	458 479 1889 2051 2591	Sall	1	959			
Alw44I	3	2597 3097 4343			3058 3467 3633 4173 4599	SapI	1	2667			
AlwNI	1	3199	DpnI	25		Sau96I	16				
ApaBI	1	1360	DraI	3	3542 3561 4253	Sau3AI	25				
ApoI	1	4669	DrdI	2	2476 2891	Scal	1	4156			
AvaI	2	515 1733	DsaI	3	580 836 1755	ScrFI	17				
Avall	8	1107 1195 1444 1747 1789	EaeI	6	295 707 839 1247 1752	SfaNI	22				
		2068 3814 4036			4064	Sfcl	5	138 645 3048 3239 3917			
BamHI	1	510	EagI	1	1247	SgrAI	1	718			
BanI	10	76 119 537 721 742	Eam1106I	1	3676	SphI	1	874			
		856 1074 1513 1597 3624	EarI	2	2667 4471	SspI	1	4480			
BanII	2	783 797	Ecil	4	1703 2857 3003 3831	StyI	3	435 580 1677			
BbsI	3	1038 1901 4654	Eco47III	4	234 804 1085 2037	TaqI	10	24 339 516 674 682			
BbvI	28		Eco57I	2	3331 4343			960 1435 1576 2883 4327			
BccI	10	570 768 861 1298 1387	EcoNI	1	934	TaqII	6	978 2685 4024 4209 4362			
		1694 1706 3713 3837 4124	EcoQ109I	5	431 832 1747 1789 4652			4379			
Bce83I	7	399 993 1163 2874 3172	EcoRI	1	4669	TfiI	6	1160 1314 1612 1833 2337			
		3413 4281	EcoRII	7	129 540 1366 1749 2809			2758			
BcofI	3	918 1475 3285			2930 2943	ThaI	26				
BcgI	6	1005 1039 2360 2394 4181	EcoRV	2	187 378	TseI	28				
		4215	FauI	11		Tsp46I	9	124 212 1188 1455 2222			
Bfal	7	230 448 620 1797 3278	FokI	12				2435 2530 3932 4143			
		3531 3866	FspI	4	262 1666 1764 3898	Tsp509I	10	58 251 611 661 1627			
BglI	3	1243 1477 3796	GdlI	5	295 707 839 1247 4064			1641 3543 3849 4104 4669			
BglII	1	677	HaeI	7	1228 1300 1357 1754 2798	Tth111I	1	2528			
BpmI	4	1140 1694 2310 3746			2809 3261\	Tth111II	5	2244 3373 3380 3412 4668			
Bpu10I	1	1889	Haell	11		UbaII	24				
Bpu1102I	1	458	HaellI	24		VspI	2	660 3848			
BsaI	2	644 3737	Hgal	11		XbaI	1	619			
BsaAI	1	2535	HgiEII	1	3369	XhoI	1	515			
BsaBI	3	676 682 1980	Hhal	32		XmnI	2	2341 4275			
BsaHI	6	722 743 857 1514 4213	Hin4I	5	16 334 1449 3675 3749						
		4595	HincII	2	961 4217	Enzymes that do not cut pET-14b:					
BsaJI	10	115 129 435 580 836	HindIII	1	29	AflII		Agel	Apal	AscI	AvrII
		842 1475 1677 1755 2943	HindI	11		BaeI		BclI	BmgI	BsaXI	BseRI
BsaWI	6	380 1001 1972 2989 3136	HphI	12		BsrGI		BclII	BstEII	BstXI	Bsu36I
		3967	Maell	10	1209 1265 1854 1878 2108	DraII		DrdII	FseI	HpaI	KpnI
Bsbl	2	2499 4219			2534 3486 3902 4275 4595	MluI		MunI	NotI	NsiI	NspV
BscGI	13		MaellI	17		PacI		PmeI	PmlI	RleAI	RsrII
BsgI	1	1943	MbolI	11		SacI		SacII	SoxAI	SfiI	SglI
Bsil	3	2956 4340 4647	Mmel	4	222 309 2998 3182	SmaI		SnaBI	SpeI	SrfI	Sse8387I
BsIE	7	289 964 1250 2699 3123	MnII	31		StuI		SunI	Swal	XcmI	
		4046 4195	MscI	1	1754						
BsII	21		Msel	18							
BsmI	1	1667	Msil	7	1339 1770 1965 2356 3928						
BsmAI	4	644 2424 3737 4513			4087 4446						
BsmBI	1	2424	MspI	28							
BsmFI	4	860 1181 1406 2054	MspA11	8	462 548 1449 2374 2493						
BsoFI	52				3125 3370 4311						
Bsp24I	8	689 721 3276 3308 3454	Mwol	36							
		3486 4580 4612	NarI	4	722 743 857 1514						
Bsp1286I	10	280 783 797 899 1486	NciI	10	171 843 1567 1793 2121						
		1777 2601 3101 4262 4347			2427 2462 3163 3859 4210						
BspEI	2	380 1972	NcoI	1	580						
BspGI	3	1367 1444 2309	NdeI	1	522						
BspLU11I	1	2783	NgoAIV	4	709 1077 1237 1591						
BspMI	1	1362	NheI	1	229						
BsrI	19		NlaIII	27							
BsrBI	2	2716 4517	NlaIV	26							
BsrDI	2	3737 3911	NruI	1	1282						
BsrFI	7	160 709 718 1077 1237	NspI	4	874 2128 2420 2787						
		1591 3756	Pfl10aI	2	1066 3694						
Bst1107I	1	2554	PfIMI	2	1629 1678						
			PleI	5	660 948 2677 3162 3665						