

pTriEx-6 Vector

TB435 0905

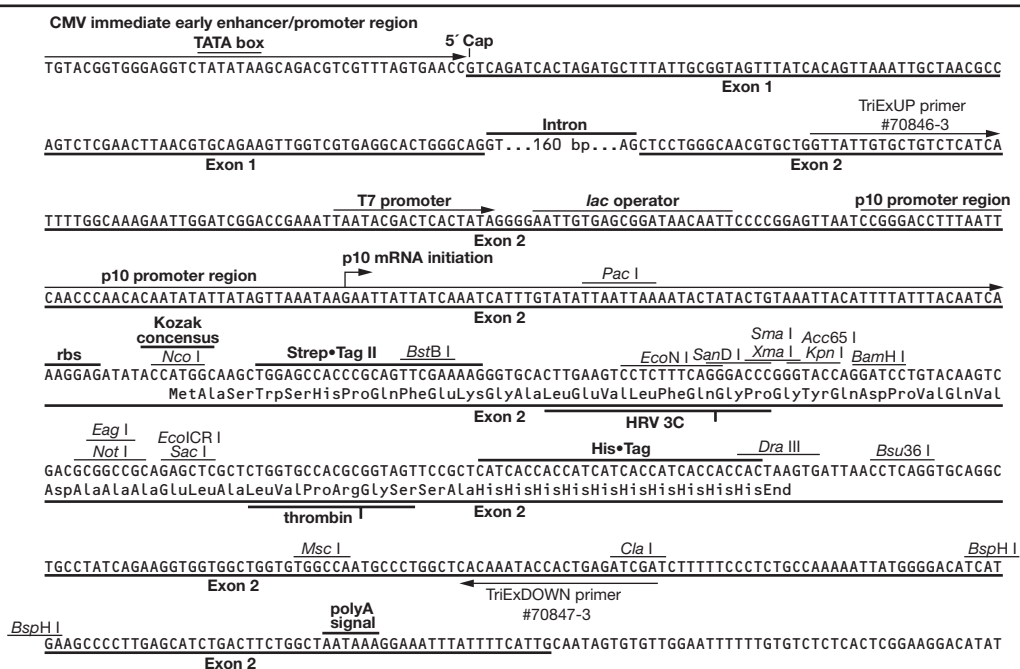
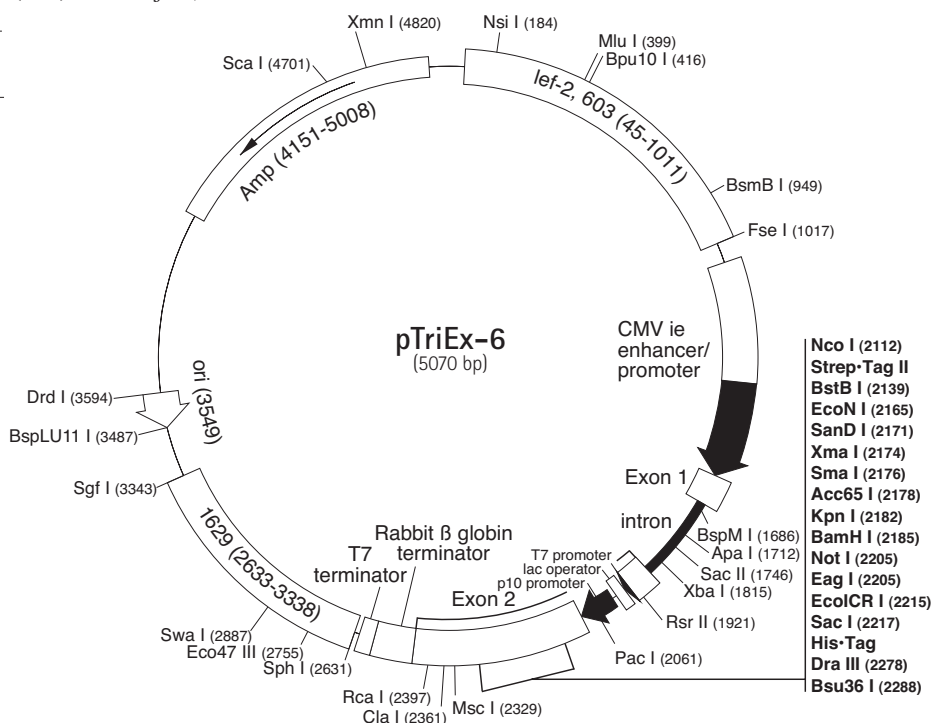
The pTriEx™ vectors¹ are uniquely designed to allow expression in *E. coli*, insect cells and vertebrate cells using a single recombinant plasmid. Transient vertebrate expression is mediated by the CMV immediate early enhancer and promoter. pTriEx-6 contains flanking baculovirus sequences for generation of recombinant baculoviruses, and expression in infected insect cells is driven by the baculovirus very late p10 promoter. Expression in *E. coli* is regulated by the tightly controlled T7lac promoter.

pTriEx-6 carries an N-terminal Strep•Tag® II coding sequence (1) followed by a recognition site for the human rhinovirus (HRV) 3C protease. This protease is highly specific for cleavage of the sequence LEVLQ↓GP (2), and is active at low temperatures (3). The multiple cloning region is followed by an optional thrombin recognition site and a C-terminal His•Tag® coding sequence. The presence of two "gentle elution" tags at both the N- and C-terminus is ideal for dual purification strategies designed to isolate full-length fusion proteins (4). Unique restriction sites are shown on the circle map.

¹Covered by U.S. Patent no. 6,589,783.

- Skerra, A., Schmidt, T.G.M. (2000) *Meth. Enzymol.* 326, 271-304.
- Cordingley, M.G., Register, R.B., Callahan, P.L., Garsky, V.M., and Colonno, R.J. (1989) *J. Virol.* 63, 5037-5045.
- Wang, Q.M., Johnson, R.B., Cox, G.A., Villarreal, E.C., and Loncharich, R.J. (1997) *Anal. Biochem.* 252, 238-245.
- Fiedler, M., Horn, C., Bandtlow, C., Schwab, M.E. (2002) *Protein Eng.* 15, 931-941.

	Cat No.
pTriEx-6 DNA	71559-3
pTriEx-6 sequence landmarks	
CMV ie enhancer/promoter	1021-1597
Vertebrate transcription start	1598
T7 promoter	1931-1947
T7 transcription start	1948
lac operator	1952-1972
p10 promoter region	1986-2099
p10 transcription start	2030-2031
Strep•Tag II coding sequence	2123-2146
Multiple cloning sites	2170-2281
(<i>SanD</i> I - <i>Dra</i> III)	
His•Tag coding sequence	2246-2275
Rabbit globin terminator	2363-2569
<i>bla</i> (Amp ^R)	4151-5008
pUC ori	3549



pTriEx-6 cloning/expression region

pTriEx-6 Restriction Sites

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Enzyme	# Sites	Locations						Enzyme	# Sites	Locations					
AatII	6	1140	1193	1276	1462	1583		EarI	3	51	547	5016			
Acc65I	1	3078						Ecil	4	1249	3549	3694	4364		
AccI	2	244	2199					Eco57I	2	4034	4888				
AcII	2	4447	4820					Eco57MI	4	2143	4034	4291	4888		
AfeI	1	2755						EcoICRI	1	2215					
AfIII	4	399	3148	3298	3487			EcoNI	1	2165					
AhdI	2	499	4221					EcoO109I	4	1709	1989	2171	2589		
AlwNI	2	1865	3902					FseI	1	1017					
Apal	1	1712						FspI	2	659	4443				
ApaLI	3	2148	3800	4888				HaeII	2	2757	3734				
Asel	5	1022	1930	2057	3282	4393		HincII	3	245	1531	2200			
AsiSI	1	3343						KpnI	1	2182					
Aval	2	1732	2174					MfeI	2	2786	3131				
Bael	1	2195						MluI	1	399					
BamHI	1	2185						MscI	1	2329					
BanI	4	1480	2178	2224	4169			MsiI	7	950	1380	1837	2526	4473	
BanII	2	1712	2217							4632	4991				
BbsI	2	498	3256					NaeI	2	783	1015				
BbvCI	1	416						NcoI	1	2112					
BceAI	2	1769	3988					NdeI	4	1249	2497	2557	2565		
BcgI	2	2163	4760					NgoMIV	2	781	1013				
BciVI	2	582	3689					NotI	1	2205					
BfrBI	1	182						NsiI	1	184					
BglI	4	1105	1227	1298	4341			NspI	2	2631	3491				
Bme1580I	4	1712	2152	3804	4892			PacI	1	2061					
BmgBI	1	3301						PciI	1	3487					
Bmri	3	1304	1700	4261				PfoI	1	1985					
Bpml	2	2143	4291					Ppil	1	4853					
Bpu10I	1	416						PpuMI	2	1989	2171				
BpuEI	6	2429	2626	3577	3875	4116		Psil	4	320	409	2822	3379		
		4826						PspOMI	1	1708					
BsaAI	2	1355	2797					Psrl	1	3053					
BsaHI	9	495	1137	1190	1273	1459		PvuI	2	3343	4591				
		1580	3075	3275	4758			RsrII	1	1921					
Bsal	2	285	4282					SacI	1	2217					
BsaWI	4	833	3692	3839	4512			SacII	1	1746					
BsaXI	1	171						Sall	2	243	2198				
BseYI	1	3790						SanDI	1	2171					
BsgI	2	1689	2314					Scal	1	4701					
BsiEI	6	2208	3343	3403	3826	4591		Sfcl	5	1857	1943	3751	3942	4462	
		4740						SmaI	1	2176					
BsiHKA1	5	2152	2217	3804	4807	4892		SmlI	6	2408	2605	3592	3854	4131	
BsmAI	8	285	949	1449	1659	1897				4841					
		2483	4282	5058				SnaBI	2	1355	2797				
BsmBI	1	949						SphI	1	2631					
BsmFI	9	1190	1341	1509	1764	1783		Sspl	4	425	2891	3088	5025		
		2002	2184	2405	3203			Styl	2	2112	2584				
Bsp1286I	6	1712	2152	2217	3804	4807		Swal	1	2887					
		4892						TaqII	4	1938	3389	4569	4754		
BspCNI	6	408	2301	2347	3774	4191		TatI	10	49	768	1232	1312	1345	
		4710								1396	2191	2740	3127	4699	
BspHI	1	2397						TspGWI	3	247	4661	5003			
BspMI	1	1686						XbaI	1	1815					
BsrBI	4	1728	1960	2243	3420			XmaI	1	2174					
BsrDI	4	79	2448	4282	4456			XmnI	1	4820					
BsrFI	5	42	781	1013	1806	4301		ZraI	6	1138	1191	1274	1460	1581	
BsrGI	4	49	768	2191	3127					3076					
BssSI	2	3659	4885					Enzymes that do not cut pTriEx-6:							
BstAPI	1	2558						AarI		AfIII		Agel		AleI	
BstBI	1	2139						AvrII		BbeI		BclI		BglIII	
BstXI	2	167	2337					BpII		BsaBI		BseRI		BsiWI	
BstYI	5	2185	4127	4138	4846	4863		BssHII		BstEII		BstZ17I		EcoRI	
Bsu36I	1	2288						FspAI		HindIII		HpaI		KasI	
BtgI	2	1743	2112					NruI		PfiMI		PmeI		PmlI	
BtsI	2	4621	4641					PvuII		SapI		SbfI		SexAI	
Clal	1	2361						SgrAI		SpeI		SrfI		StuI	
DraI	4	429	2517	2887	4798			XhoI						Tth111I	
DraIII	1	2278												XcmI	
DrdI	1	3594													
EaeI	4	1011	2205	2327	4609										
EagI	1	2205													