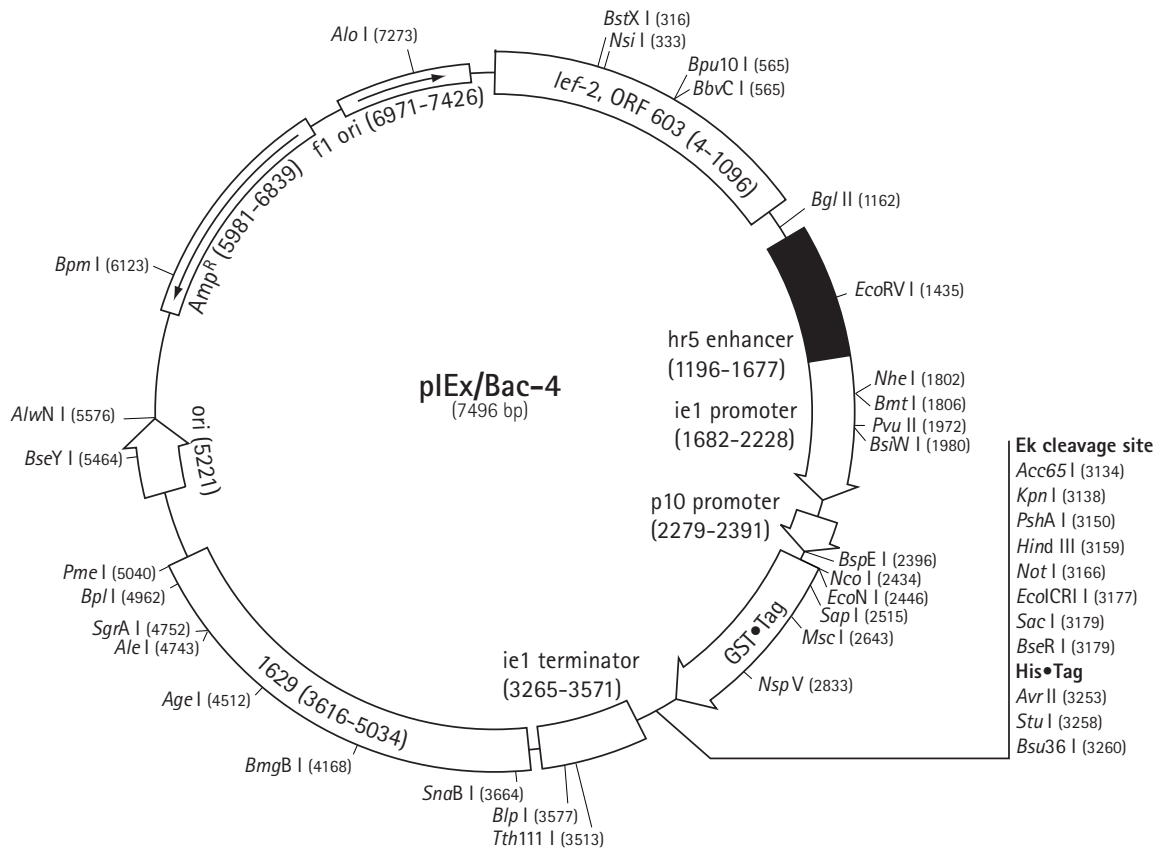


The dual-purpose pEx/Bac™ vectors are designed for cloning and high-level expression of proteins by transiently transfecting *Spodoptera*-derived insect cells or by generating baculovirus recombinants. Transient transfection and early baculovirus expression is driven by the AcNPV-derived hr5 enhancer and ie1 promoter combination that recruits endogenous insect cell transcription machinery. Late/very late expression in the baculovirus mode is driven by the strong p10 promoter. The pEx/Bac-4 vector carries an N-terminal GST•Tag™ coding sequence followed by a recognition site for enterokinase. The multiple cloning region is followed by an optional C-terminal His•Tag® coding sequence. The presence of “gentle elution” tags at both the N- and C-termini is ideal for dual purification strategies designed to isolate full-length fusion proteins. Unique restriction sites are shown on the circle map.

Feature	Location	Cat No.
pEx/Bac™-4 DNA		71727-3
hr5 enhancer	1196–1677	
ie1 promoter	1682–2228	
ie1 transcription start	2212	
p10 promoter	2279–2391	
p10 transcription starts	2323, 2324	
GST•Tag™ coding sequence	2435–3094	
Multiple cloning sites (Kpn I–Bsu36 I)	3133–3264	
His•Tag® coding sequence	3203–3232	
ie1 terminator	3265–3571	
pUC ori	5221	
bla (Amp <sup>R</sup> )	5982–6839	
f1 origin	6971–7426	

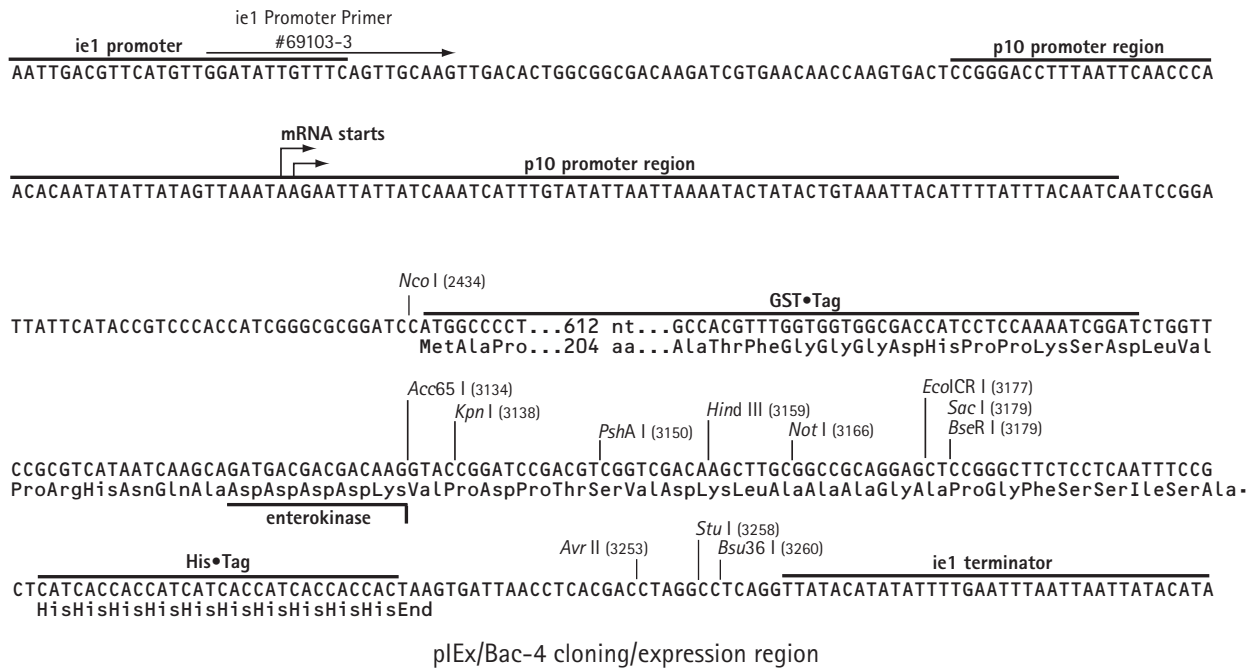


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Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations			
AatII	2	3150 3945	BsrDI	3	228 6114 6288	PciI	2	2674 5160			
Acc65I	1	3134	BsrGI	3	198 917 3994	PinAI	1	4512			
AceII	1	1806	BssHII	2	1698 1959	PmeI	1	5040			
AceIII	5	1888 4330 5112 6352 7358	BssSI	3	1989 5333 6717	PpiI	3	5875 6685 7241			
AclI	4	3523 6279 6652 7415	BstBI	1	2833	Ppu10I	1	329			
AfeI	2	3622 4805	BstXI	1	316	PshAI	1	3150			
AgeI	1	4512	Bsu36I	1	3260	PsiI	6	469 558 1605 3689 4832			
AhdI	2	648 6053	BtrI	1	4168			7330			
AleI	1	4743	BtsI	3	1923 6453 6473	Psp1406I	4	3523 6279 6652 7415			
Alol	1	7241	CjeI	20	2479 2507 2716 3428 4113	Psrl	5	1285 1494 1567 3920 4700			
AlwNI	1	5576	CjePI	10	5653 5718 5831 5951 6423	PvuI	3	1403 6423 7469			
ApaLI	2	5474 6720	Clal	3	1403 4636 4959	PvuII	1	1972			
Asel	7	21 129 2027 2351 3289	DraI	9	46 578 2863 2972 3754	RcaI	2	5880 6888			
		4149 6225			5040 5919 5938 6630	RleAI	4	306 3010 3338 4735			
AvrII	1	3253	DrallI	2	3236 7205	SacI	1	3179			
BamHI	2	2430 3140	DrdI	2	5268 7249	Sall	3	107 392 3153			
BbeI	2	4498 4765	EagI	2	2038 3166	SapI	1	2515			
Bbr7I	2	642 4128	EarI	5	200 696 2515 6848 7486	Scal	2	3009 6533			
BbsI	2	647 4123	Ecil	8	2112 4405 4411 4417 5222	SfoI	2	4496 4763			
BbvCI	1	565			5368 6196 7496	SgrAI	1	4752			
BcgI	5	2466 3178 3407 4445 6592	Ecl136II	1	3177	SnaBI	1	3664			
BciVI	5	731 1729 2064 5363 6890	Eco47III	2	3622 4805	SphI	2	1810 3587			
BclI	4	1157 1167 1974 2870	Eco57I	2	5708 6720	Sspl	9	156 574 2169 3450 3758			
BfrBI	1	331	EcoCR I	1	3177			3955 4828 6857 7410			
BglI	3	2191 6173 7441	EcoNI	1	2446	StuI	1	3258			
BglII	1	1162	EcoRI	5	1279 1381 1488 1561 1668	SunI	1	1980			
BlpI	1	3577	EcoRV	1	1435	Swal	2	2863 3754			
BmgBI	1	4168	EheI	2	4496 4763	TaqII	5	3140 5062 6401 6586 7300			
BmrI	2	3551 6093	FspI	4	808 1850 6275 7448	Tth111I	1	3513			
BpII	1	4962	HindIII	1	3159	VspI	7	21 129 2027 2351 3289			
Bpml	1	6123	KasI	2	4494 4761			4149 6225			
Bpu10I	1	565	KpnI	1	3138	Xmnl	3	2829 4205 6652			
BpuEI	5	4932 5251 5549 5790 6658	MfeI	4	3653 3998 4559 4924	Zral	2	3148 3943			
BsaI	2	434 6114	MluI	2	548 2068						
BsaXI	3	320 3420 7241	MscI	1	2643	Enzymes that do not cut pIEx/Bac-4:					
BseRI	1	3179	MunI	4	3653 3998 4559 4924	ApaBI	Apal	AscI	AsiSI	AarI	AfII
BseYI	1	5464	NaeI	2	932 7099	BsaBI	BspMI	Bst1107I	BstAPI	BstEII	BloHI
BsgI	4	2722 4309 4603 4757	NarI	2	4495 4762	Fall	FseI	FspAI	HpaI	NdeI	NruI
BsiWI	1	1980	NcoI	1	2434	PfIMI	PmII	PspOMI	PstI	RsrII	SacI
BsmBI	2	1098 4514	NgoAIV	2	930 7097	SanDI	SbfI	Scil	SexAI	SfiI	SgfI
BsmI	2	86 1971	NgoMIV	2	930 7097	Smal	SpeI	SrfI	Sse232I	Sse8387I	Sse8647I
Bsp24I	4	2511 4080 5685 5863	NheI	1	1802	XbaI	XcmI	XhoI	XmaI		
BspEI	1	2396	NotI	1	3166						
BspHI	2	5880 6888	Nsil	1	333						
BspLU11I	2	2674 5160	NspV	1	2833						
BsrBI	8	2059 2727 3201 4617 4912	Pacl	2	2355 3289						
		5093 6894 7058									