

pAcP(+)*IE1-4* Transfer Plasmid



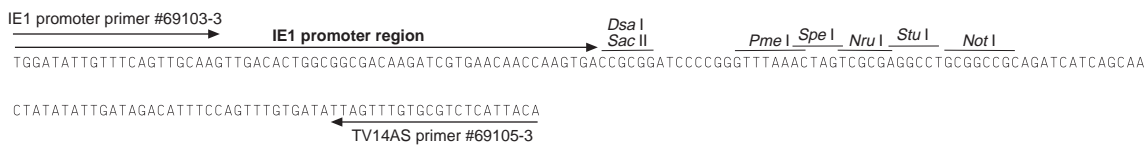
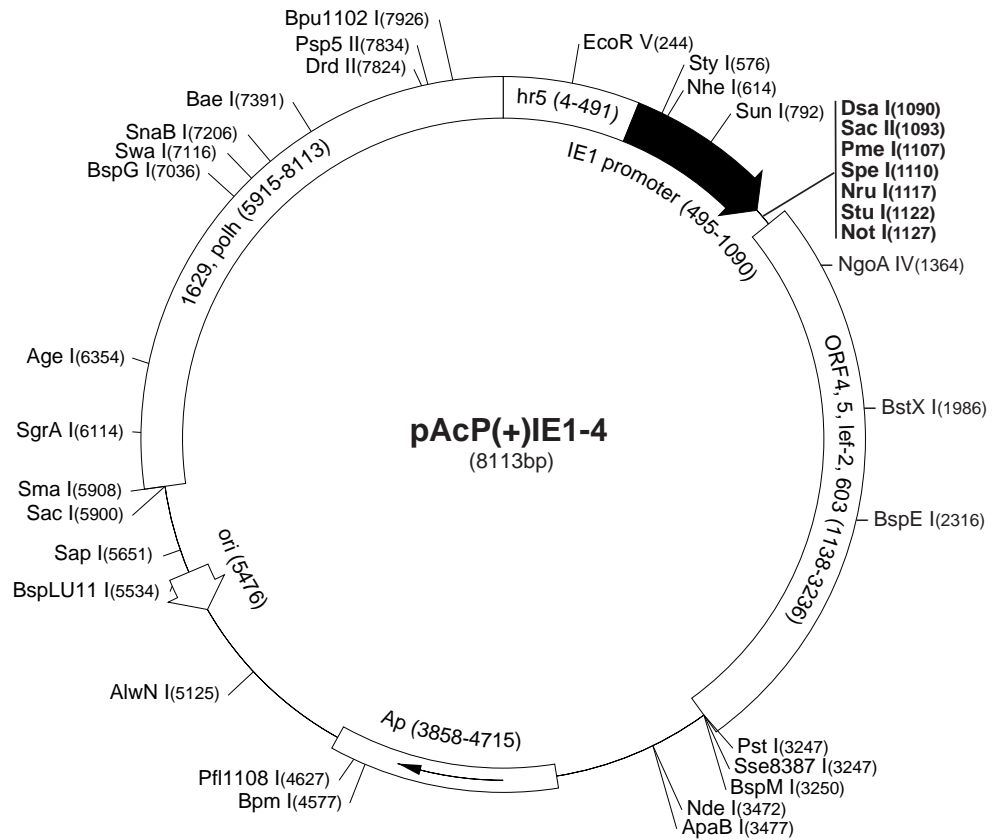
Promoter
Cloning options
AcNPV *IE1*
polylinker

The pAcP(+)*IE1-4* transfer plasmid (Cat. No. 69095-3) is designed for the production of recombinant baculoviruses containing foreign genes under the control of the baculovirus *ie1* promoter (1). The P(+) designation indicates that this transfer plasmid carries the intact *polyhedrin* gene and will therefore produce occlusion-positive baculoviruses when used with appropriate *occ-* baculovirus DNA, e.g., BacVector™-1000 Triple Cut Virus DNA (Cat. No. 70059-3). Inserts must carry their own ATG translation start codon. The *hr5* element, *ie1* promoter, and *mcs* sequences are targeted for insertion into the polyhedrin locus of the viral genome. Unique restriction sites are indicated on the circle map. The cloning/expression region of the coding strand transcribed from the *ie1* promoter is shown below.

1. Jarvis, D.L., Weinkauff, C. and Guarino, L.A. (1996) *Prot. Exp. Pur.* **8**, 191-203.

pAcP(+)*IE1-4* sequence landmarks

<i>hr5</i> enhancer	4-491
<i>ie1</i> promoter + 5'UTR	495-1090
Multiple cloning sites (<i>Sac</i> II - <i>Pme</i> I)	1090-1135



pAcP(+)*IE1-4* cloning/expression region

pAcP(+)|E1-4 Restriction Sites

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations		
AatII	2	3727 6929	BsrFI	5	1364 4561 6114 6162 6354	NdeI	1	3472		
AccI	2	1903 2188	BsrGI	6	1377 2096 2303 2956 3138 6872	NgoAIV	1	1364		
AceIII	5	700 3600 4342 5582 6536	BssHII	2	510 771	NheI	1	614		
Acil	80		BstXI	1	1986	NlaIII	32			
AflIII	16		BstYI	9	1094 3999 4016 4784 4796 4882 4893 5910 7846	NlaIV	26			
AgeI	1	6354	Cac8I	35		NotI	1	1127		
AluI	34		CjeI	34		NruI	1	1117		
AlwI	17		CjePI	16		Nsil	2	1969 2469		
Alw21I	7	2673 2684 3481 3978 4063 5224 5900	Clal	3	212 6232 7435	Nspl	10	622 699 2187 2304 3007 3031 3253 3621 5538 7653		
Alw44I	5	2669 2680 3477 3974 5220	CviJI	96		NspV	2	3079 7447		
AlwNI	1	5125	CviRI	37		Pfi1108I	1	4627		
ApaBI	1	3477	Ddel	13		PleI	12			
ApoI	20		Dpnl	34		PmeI	1	1107		
AvaI	3	1099 2868 5906	Drar	7	1107 1720 2252 4068 4760 4779 7116	Psp5II	1	7834		
Avall	8	596 631 2501 4282 4504 7294 7722 7834	DrdI	2	3563 5432	Psp1406I	4	2962 3015 4044 4417		
BaeI	1	7391	DrdII	1	7824	PstI	1	3247		
BamHI	3	1094 5910 7846	Dsal	1	1090	PvuI	6	108 212 3238 3381 4277 7435		
BanI	11		EaeI	6	850 1127 3202 3266 4253 5695	PvuII	3	784 3350 5714		
BanII	2	169 5900	EagI	2	850 1127	RcaI	4	3701 3806 4814 7570		
BbsI	3	1647 6743 7700	Eam1105I	3	1651 2517 4646	RleAI	2	1995 6138		
BbvI	25		EarI	7	2095 3359 3847 5651 7377 7801 7896	RsaI	27			
BccI	16		Ecil	8	910 2286 4490 5318 5464 6467 6473 6479	SacI	1	5900		
Bce83I	5	4042 4910 5151 5449 5940	Eco47III	2	6065 7248	SacII	1	1093		
Bcefl	10	71 739 2276 2950 3254 5035 6386 6427 6541 7958	Eco57I	3	3980 4992 7358	Sall	2	1902 2187		
Bcgl	8	3031 3065 3224 3258 4108 4142 6393 6427	EcoO109I	2	3666 7834	SapI	1	5651		
BclI	2	786 2902	EcoRI	6	86 190 297 373 480 5890	Sau96I	13			
Bfal	13		EcoRII	9	3300 5373 5386 5507 5795 7342 7507 7612 7837	Sau3AI	34			
BglI	3	1003 3410 4528	EcoRV	1	244	Scal	2	4165 7963		
Bmgl	2	6120 6620	FauI	13		ScrFI	19			
BpmI	1	4577	FokI	11		SfaNI	14			
Bpu10I	2	1730 7851	FspI	5	662 1490 3053 3400 4423	Sfcl	5	3243 4400 5078 5269 7735		
Bpu1102I	1	7926	GdIII	6	850 1127 3202 3266 4253 5695	SgrAI	1	6114		
BsaI	2	1860 4580	HaeI	4	1122 5060 5512 5523	SmaI	2	1101 5908		
BsaAI	5	198 381 792 7206 7979	HaeII	8	3423 5294 5664 6067 6109 6211 6376 7250	SnaBI	1	7206		
BsaBI	3	2725 7561 8088	HaeIII	18		SpeI	1	1110		
BsaHI	9	1652 3219 3420 3724 4106 6106 6373 6726 6926	Hgal	16		SphI	3	622 3007 3253		
BsaJI	10	576 1090 1098 1099 3300 5374 5795 5906 7343 7837	HgiEI	2	3472 4952	Sse8387I	1	3247		
BsaWI	6	1312 2316 4350 5181 5328 6354	Hhal	46		SspI	8	981 1724 2142 3092 3841 6042 6915 7112		
BsaXI	4	795 1994 2367 5680	Hin4I	14		StuI	1	1122		
Bsbl	6	1433 2739 3538 6411 6600 7607	HincII	7	1052 1904 2189 2295 3223 7655 7691	StyI	1	576		
BscGI	13		HindIII	3	3255 6839 7767	SunI	1	792		
BseRI	3	789 1619 7359	Hinfl	17		Swal	1	7116		
Bsgl	3	6115 6269 6563	Hpal	2	2295 7691	TaqI	31			
Bsil	5	801 2654 3670 3977 5361	HphI	12		TaqII	7	1992 3944 3961 4114 4299 5638 7555		
BsiEI	12		KpnI	2	5906 7390	TfiI	5	1700 2507 5560 5700 7240		
BsII	15		MaeI	28		Thal	34			
BsmI	3	783 2214 2467	MaeII	22		Tsel	25			
BsmAI	9	1196 1860 3609 3651 3804 4580 5916 6352 6415	MbolI	18		Tsp45I	7	1085 2547 2602 3286 3597 4173 4384		
BsmBI	4	1196 3609 3651 6352	MluI	3	880 1746 2665	Tsp509I	59			
BsmFI	4	6796 7658 7820 8012	MmeI	5	1008 5141 5325 6293 7783	Tth111II	6	1238 3071 4911 4943 4950 7054		
BsoFI	48		MnlI	42		UbaII	23			
Bsp24I	8	3714 3746 4840 4872 5018 5050 6763 6795	Msel	59		VspI	7	839 2167 2275 4471 5706 5765 6719		
Bsp1286I	10	169 2673 2684 3481 3978 4063 5224 5900 6122 6622	Msil	7	1199 2227 2734 3875 4234 4393 6127	XmnI	3	4046 6665 7915		
BspEI	1	2316	MspI	24		Enzymes that do not cut pAcP(+) E1-4:				
BspGI	1	7036	MspA1I	13		AflIII	Apal	AscI	AvrII	BglII
BspLU11I	1	5534	MunI	4	5942 6307 6868 7213	Bst1107I	BstEII	Bsu36I	DrarIII	EcoNI
BspMI	1	3250	MwoI	33		FseI	MscI	NcoI	Pacl	PfiMI
BsrI	16		NarI	3	3420 6106 6373	PmlI	PshAI	RsrII	SexAI	Sfil
BsrBI	8	871 2444 3190 3804 5605 5846 5958 6253	NciI	10	1100 1101 3574 3609 4110 4461 5157 5907 5908 7832	Sgfl	SrfI	Tth111I	XbaI	XcmI
BsrDI	4	2072 2989 4412 4586				XhoI				