pAcP(–)IE1-6 Transfer Plasmid

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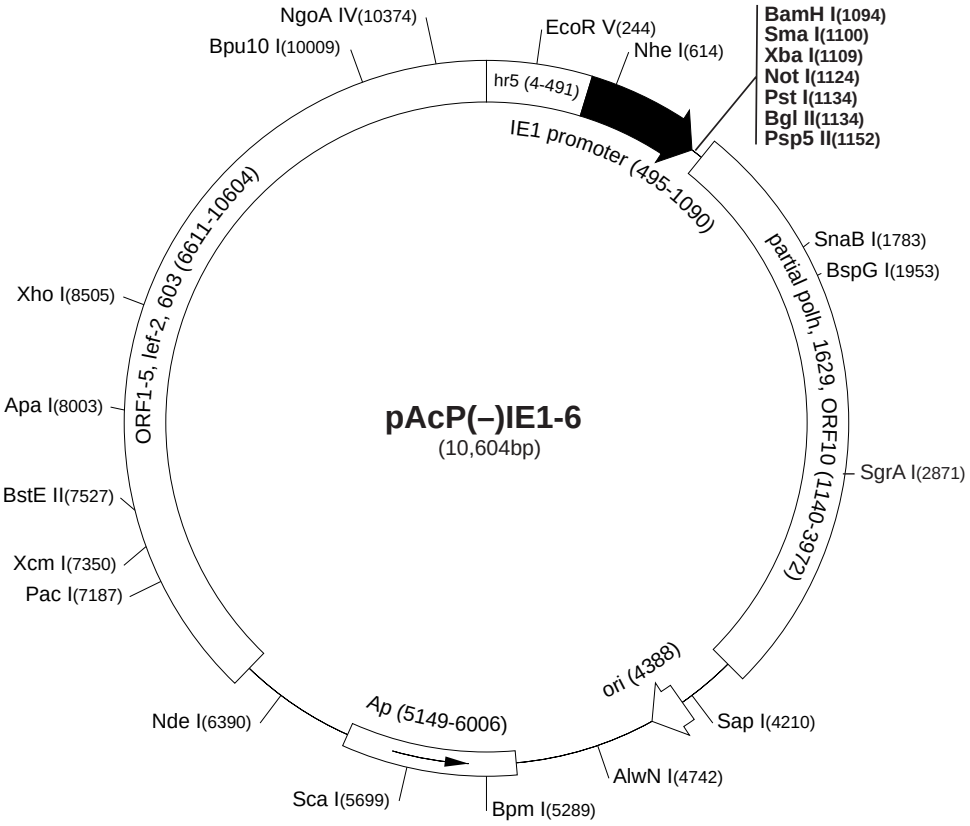
Promoter	AcNPV IE1
Cloning options	polylinker

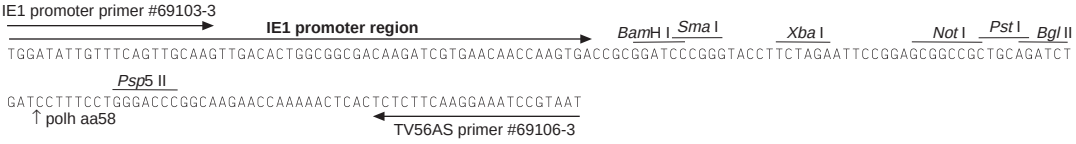
The pAcP(–)IE1-6 transfer plasmid (Cat. No. 69097-3) is designed for the production of recombinant baculoviruses containing foreign genes under the control of the baculovirus ie1 promoter (1). The P(–) designation indicates that this transfer plasmid will produce occlusion-negative recombinants. Inserts must carry their own ATG translation start codon. Inserts lacking stop codons and cloned in-frame with downstream polh sequences will produce proteins fused with the C-terminal 187aa of polyhedrin protein. 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., Weinkauf, C. and Guarino, L.A. (1996) *Prot. Exp. Pur.* **8**, 191–203.

pAcP(–)IE1-5 sequence landmarks

hr5 enhancer	4–491
ie1 promoter + 5'UTR	495–1090
ie1 translation initiation	1092
Multiple cloning sites (*Bam*H I – *Psp*5 II)	1094–1157





pAcP(–)IE1-6 cloning/expression region

pAcP(–)IE1-6 Restriction Sites

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Enzyme	# Sites	Locations				
AatII	3	2064	6141	8104		
AccI	4	3141	8047	9552	9837	
AceIII	5	700	2449	4278	5518	6260
AciI	106					
AflIII	19					
AgeI	2	2631	7055			
AluI	40					
AlwI	17					
Alw21I	11					
Alw44I	7	3861	4640	5886	6383	7028
		9058	9069			
AlwNI	1	4742				
ApaI	1	8003				
ApaBI	3	6392	6899	7947		
ApoI	26					
AvaI	4	1098	6767	8505	8870	
AvaII	10	596	631	1152	1264	1692
		5357	5579	6807	8120	9238
BaeI	2	1598	8213			
BamHI	1	1094				
BanI	11					
BanII	2	169	8003			
BbsI	3	1285	2242	10091		
BbvI	30					
BccI	19					
Bce83I	6	3051	4417	4715	4956	5824
		7862				
BcefI	14					
BcgI	10	2564	2598	5724	5758	6758
		6792	7505	7539	8679	8713
BclI	2	786	8836			
BfaI	15					
BglI	3	1003	5339	6457		
BglII	1	1134				
BmgI	3	2369	2869	8001		
BpmI	1	5289				
Bpu10I	1	10009				
BsaI	3	5280	8345	9878		
BsaAI	10	198	381	792	1783	6672
		6784	7394	8059	8144	8214
BsaBI	5	1428	3293	3343	6735	9017
BsaHI	12					
BsaJI	13					
BsaWI	11					
BsaXI	4	795	4184	9375	9748	
BsbI	11					
BscGI	15					
BseRI	5	789	1632	7782	7785	10125
BsgI	7	2428	2722	2876	7018	7090
		7852	8484			
BsiI	5	801	4499	5883	6190	9084
BsiEI	11					
BsII	19					
BsmI	4	783	7199	9277	9530	
BsmAI	11					
BsmBI	4	2633	6209	6251	10542	
BsmFI	5	1165	1327	2189	3631	6993
BsoFI	62					
Bsp24I	8	2199	2231	4819	4851	4997
		5029	6123	6155		
Bsp1286I	15					
BspEI	3	1117	3890	9422		
BspGI	1	1953				
BspLU11I	2	3148	4326			
BspMI	3	7540	7636	8141		
BsrI	18					
BsrBI	9	871	1123	2736	3031	4018
		4259	6060	8552	9298	
BsrDI	4	5280	5454	8755	9672	
BsrFI	11					
BsrGI	8	2113	3333	7592	8600	8782
		9435	9642	10361		

Enzyme	# Sites	Locations				
BssHII	2	510	771			
BstEII	1	7527				
BstXI	3	7353	7512	9760		
BstYI	8	1094	1134	4967	4978	5064
		5076	5844	5861		
Cac8I	43					
CjeI	36					
CjePI	20					
ClaI	4	212	1552	2755	6855	
CviJI	121					
CviRI	58					
DdeI	13					
DpnI	40					
DraI	12					
DrdI	4	4434	6303	7536	8127	
DrdII	2	1165	7255			
DsaI	2	1090	7472			
EaeI	11					
EagI	2	850	1124			
Eam1105I	3	5219	9226	10092		
EarI	6	1185	1609	4210	6014	6502
		9644				
EciI	8	910	2510	2516	2522	4400
		4546	5374	9456		
Eco47III	3	1741	2924	3730		
Eco57I	3	1633	4874	5886		
EcoO109I	4	1152	6195	7999	8000	
EcoRI	6	86	190	297	373	480
		1113				
EcoRII	12					
EcoRV	1	244				
FauI	21					
FokI	13					
FspI	6	662	3293	5441	6464	8689
		10252				
GdiII	8	850	1124	4165	5607	6594
		6715	7405	8536		
HaeI	7	3363	4341	4352	4804	6939
		7642	8110			
HaeII	11					
HaeIII	27					
HgaI	21					
HgiEII	2	4912	6392			
HhaI	65					
Hin4I	15					
HincII	10	1052	1298	1334	3142	3948
		8492	8519	9447	9553	9838
HindIII	4	1218	2146	3182	6605	
HinfI	23					
HpaI	3	1298	3948	9447		
HphI	16					
KpnI	2	1106	1603			
MaeII	48					
MaeIII	29					
MboII	22					
MluI	3	880	9073	9992		
MmeI	7	1008	1208	2698	3856	4541
		4725	7520			
MnlI	46					
MscI	3	3363	6939	8110		
MseI	81					
MslI	12					
MspI	35					
MspA1I	18					
MunI	4	1772	2117	2678	3043	
MwoI	48					
NarI	4	2614	2881	6442	8334	
NciI	9	1099	1100	1156	4706	5402
		5753	6254	6289	7011	
NdeI	1	6390				
NgoAIV	1	10374				
NheI	1	614				

Enzyme	# Sites	Locations				
NlaIII	38					
NlaIV	27					
NotI	1	1124				
NsiI	2	9277	9777			
NspI	13					
NspV	4	1540	3796	7125	8661	
PacI	1	7187				
Pfl1108I	2	3350	5237			
PleI	13					
PmlI	2	6672	8214			
Psp5II	1	1152				
Psp1406I	5	5445	5818	7360	8725	8778
PstI	1	1134				
PvuI	5	108	212	1556	5589	6485
PvuII	5	784	3719	4150	6514	7913
RcaI	5	1415	5046	6054	6159	7613
RleAI	2	2854	9750			
RsaI	36					
SacII	2	1093	7475			
SalI	3	3140	9551	9836		
SapI	1	4210				
Sau96I	19					
Sau3AI	40					
ScaI	1	5699				
ScrFI	21					
SfaNI	17					
SfcI	6	1130	1250	3106	4591	4782
		5460				
SgrAI	1	2871				
SmaI	1	1100				
SnaBI	1	1783				
SphI	2	622	8739			
SspI	12					
StyI	2	576	8105			
SunI	3	792	6780	7394		
SwaI	2	1873	8177			
TaqI	37					
TaqII	8	1436	3586	4228	5567	5752
		5905	5922	9752		
TfiI	10	1746	3339	3352	4161	4301
		6731	7122	7916	9232	10039
ThaI	52					
TseI	30					
Tsp45I	13					
Tsp509I	84					
Tth111II	15					
UbaJI	32					
VspI	10	839	2268	4097	4156	5391
		7047	7178	7187	9465	9573
XbaI	1	1109				
XcmI	1	7350				
XhoI	1	8505				
XmnI	4	2324	3898	5818	7851	

Enzymes that do not cut pAcP(–)IE1-6:

AflII	AscI	AvrII	Bpu1102I	Bst1107I
Bsu36I	DraIII	EcoNI	FseI	NcoI
NruI	PflMI	PmeI	PshAI	RsrII
SacI	SexAI	SfiI	SgfI	SpeI
SrfI	Sse8387I	StuI	Tth111I	