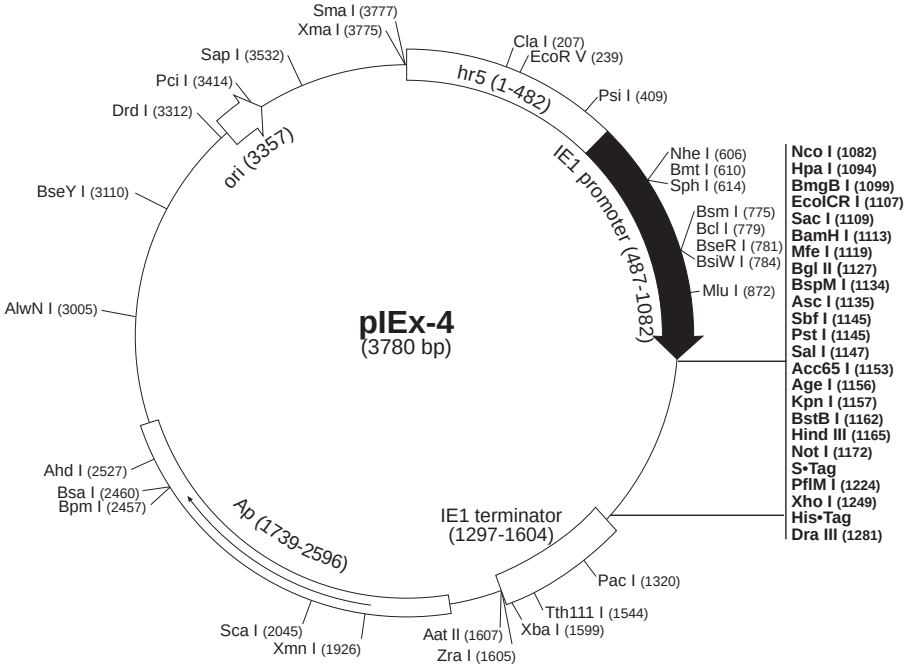
pIEx-4 Vector

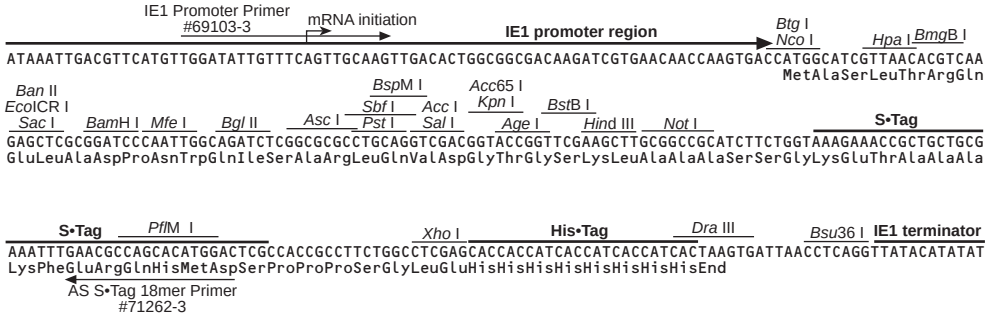
	Cat. No.
pIEx-4 DNA	71235-3

The pIEx™ vectors are designed for cloning and high-level expression of proteins in transiently transfected *Spodoptera*-derived insect cells. Transcription is driven by the AcNPV-derived hr5 enhancer and immediate early promoter, IE1. pIEx-4 contains C-terminal S•Tag and His•Tag coding sequences. Unique sites are shown on the circle map.

pIEx-4 sequence landmarks

hr5 enhancer	1–482
IE1 promoter	487–1082
IE1 transcription start	1034
Multiple cloning sites (*Nco* I–*Dra* III)	1082–1284
S•Tag™ coding sequence	1193–1237
His•Tag® coding sequence	1255–1278
IE1 terminator	1297–1604
bla (Ap) coding sequence	1739–2596
pUC origin	3357





pIEx-4 cloning/expression region

pIEx-4 Restriction Sites

TB350 0303

Enzyme	# Sites	Locations				
AatII	1	1607				
Acc65I	1	1153				
AccI	1	1148				
AclI	3	1554	1924	2297		
AflIII	5	192	372	872	1096	3414
AgeI	1	1156				
AhdI	1	2526				
AlwNI	1	3005				
ApaLI	2	1854	3100			
AscI	1	1135				
AseI	5	831	1320	2351	3586	3645
AvaI	2	1249	3775			
BamHI	1	1113				
BanI	3	1153	2573	3670		
BanII	1	1109				
BceAI	5	68	174	731	1353	2914
BcgI	2	1438	1988			
BciVI	4	533	868	1689	3216	
BclI	1	778				
BglI	2	995	2408			
BglII	1	1127				
Bme1580I	2	1858	3104			
BmgBI	1	1099				
BmrI	2	1582	2486			
BmtI	1	610				
BpmI	1	2457				
BpuEI	4	1922	2790	3031	3329	
BsaAI	3	193	373	784		
BsaHI	2	1604	1986			
BsaI	1	2460				
BsaWI	4	1156	2230	3061	3208	
BsaXI	3	803	1451	3576		
BseRI	1	781				
BseYI	1	3110				
BsiEI	7	207	845	1175	2008	2157
		3080	3504			
BsiHKAI	5	1109	1256	1858	1943	3104
BsiWI	1	784				
BsmAI	2	1684	2460			
BsmI	1	775				
Bsp1286I	5	1109	1256	1858	1943	3104
BspCNI	6	838	1304	2038	2557	2723
		3132				
BspHI	2	1686	2694			
BspMI	1	1134				
BsrBI	4	863	1684	3485	3726	
BsrDI	2	2292	2466			
BsrFI	2	1156	2441			
BssHII	3	502	763	1135		
BssSI	3	793	1857	3241		
BstBI	1	1162				
BstYI	8	1113	1127	1879	1896	2664
		2676	2762	2773		
Bsu36I	1	1291				
BtgI	1	1082				
BtrI	1	1099				
BtsI	4	727	2107	2127	3634	
ClaI	1	207				
DraI	3	1948	2640	2659		
DraIII	1	1281				
DrdI	1	3312				
EaeI	4	842	1172	2133	3575	
EagI	2	842	1172			
EarI	2	1727	3531			
EciI	4	916	2384	3212	3358	
Ecl136II	1	1107				
Eco57I	2	1860	2872			
Eco57MI	3	1860	2457	2872		
EcoICRI	1	1107				
EcoRI	6	83	185	292	365	472
		3770				
EcoRV	1	239				

Enzyme	# Sites	Locations				
FspI	2	654	2303			
HaeII	2	3174	3544			
HincII	3	1044	1094	1149		
HindIII	1	1165				
HpaI	1	1094				
KpnI	1	1157				
MfeI	1	1119				
MluI	1	872				
MslI	3	1755	2114	2273		
NcoI	1	1082				
NheI	1	606				
NotI	1	1172				
NspI	3	614	691	3418		
NspV	1	1162				
PacI	1	1320				
PciI	1	3414				
PflMI	1	1224				
PinAI	1	1156				
PpiI	2	1898	2708			
PsiI	1	409				
PsrI	3	89	298	371		
PstI	1	1145				
PvuI	2	207	2157			
PvuII	2	776	3594			
SacI	1	1109				
SalI	1	1147				
SapI	1	3531				
SbfI	1	1145				
ScaI	1	2045				
SfcI	5	1141	1464	2280	2958	3149
SmaI	1	3777				
SmlI	5	1249	1901	2769	3046	3308
SphI	1	614				
Sse8387I	1	1145				
SspI	3	973	1481	1721		
StyI	2	568	1082			
TaqII	3	1994	2179	3518		
TatI	2	724	2043			
TspGWI	6	552	587	636	790	1745
		2087				
Tth111I	1	1544				
XbaI	1	1599				
XhoI	1	1249				
XmaI	1	3775				
XmnI	1	1926				
ZraI	1	1605				

Enzymes that do not cut pIEx-4:

AarI	AfeI	AflII	AleI	AloI
ApaI	AsiSI	AvrII	BaeI	BbeI
BbsI	BbvCI	BfrBI	BlpI	BpiI
Bpu10I	BsaBI	BsgI	BsmBI	BsmFI
BspEI	BsrGI	Bst1107I	BstAPI	BstEII
BstXI	BstZ17I	EcoNI	EcoO109I	FalI
FseI	FspAI	KasI	MscI	NaeI
NarI	NdeI	NgoMIV	NruI	NsiI
PfoI	PmeI	PmlI	PpuMI	PshAI
PspOMI	RsrII	SacII	SanDI	SexAI
SfiI	SfoI	SgrAI	SnaBI	SpeI
SrfI	StuI	SwaI	XcmI	