

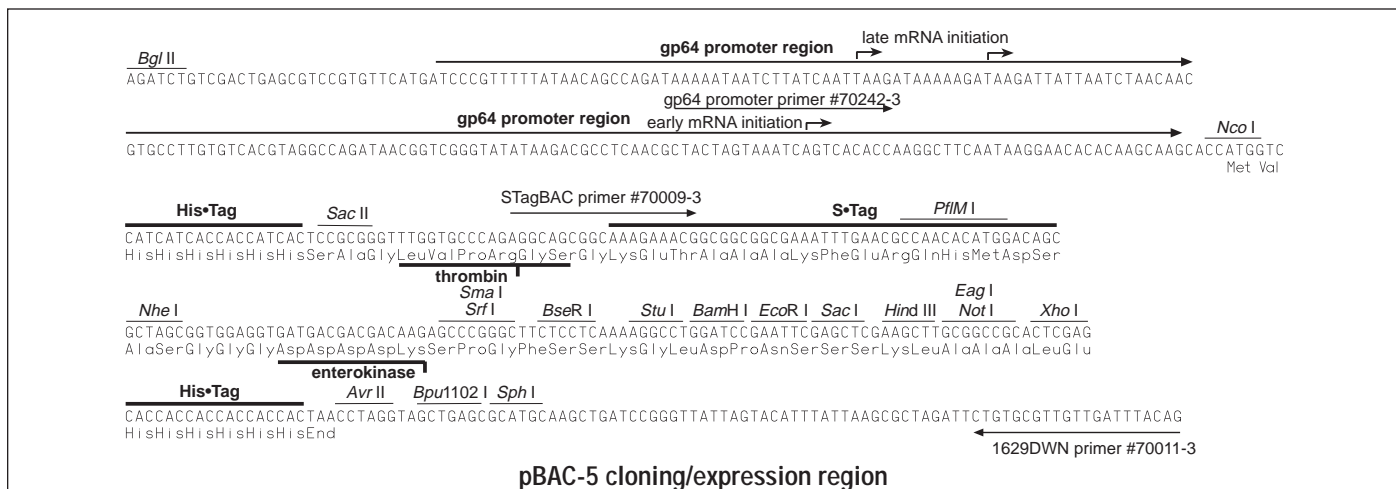
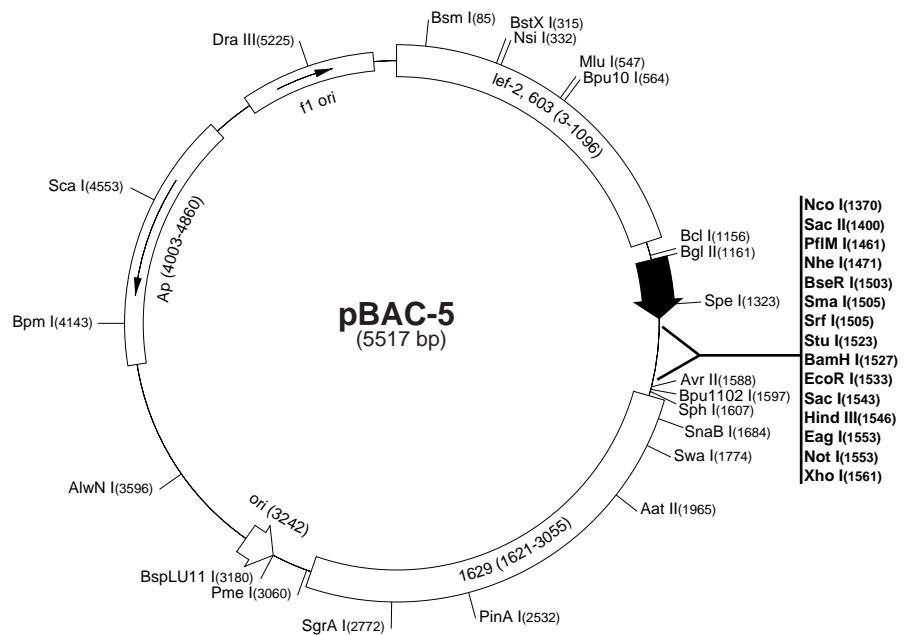
# pBAC-5 Transfer Plasmid

<b>b</b>	Locus	polh
	Promoter	gp64
	N-terminal fusion	His•Tag, S•Tag
	C-terminal fusion option	His•Tag
	Cloning options	polylinker

pBAC™-5 is a baculovirus transfer plasmid (Cat. No. 70222-3) compatible with BacVector™ -1000, -2000, or -3000 Triple Cut Virus DNA for low background transfection. A modified gp64 tandem promoter contains both an immediate early promoter for expression beginning immediately after infection and a late promoter for continued expression in the late phase of infection. The pBAC-5 Transfer Plasmid enables isolation of stably-transfected insect cell lines expressing target proteins. Cloning sites are provided for the creation of N-terminal fusions of an insert with His•Tag® and/or S•Tag™ sequences. Unique restriction sites are indicated on the circle map. The cloning/expression region of the coding strand transcribed from the gp64 promoter is shown below. The f1 origin is oriented so that infection with helper phage will produce virions containing single stranded DNA that corresponds to the coding strand. Single stranded sequencing of phage-derived DNA can be performed using the 1629DWN primer (Cat. No. 70011-3).

### pBAC-5 sequence landmarks

gp64 promoter region	1167-1371
gp64 early transcription start	1334
gp64 late transcription starts	1233, 1246
wt gp64 5'UTR -1 position	1371
His•Tag coding sequence	1378-1395
S•Tag coding sequence	1426-1470
Multiple cloning sites ( <i>Sma</i> I - <i>Xho</i> I)	1503-1566
His•Tag coding sequence (C-terminal option)	1567-1584



# pBAC-5 Restriction Sites

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations
AatII	1	1965	EaeI	2	1553 4461	SrfI	1	1505
AccI	3	107 392 1168	EagI	1	1553	SspI	7	155 573 1778 1975 2848
AcII	62		EarI	4	199 695 4868 5506			4877 5430
AflIII	5	547 2035 2185 2290 3180	Eco47III	3	1470 1642 2825	StuI	1	1523
AhdI	3	647 1175 4073	Eco57I	2	3728 4740	StyI	3	1341 1370 1588
AluI	23		EcoRI	1	1533	Swal	1	1774
AlwI	15		EcoRII	5	1523 3206 3327 3340 5514	TaiI	17	
Alw26I	8	433 1097 2471 2534 2970	FauI	10	1392 2229 2243 2391 2600	TaqI	17	
		3029 4134 4910			2630 2992 5014 5083 5487	TfiI	3	594 1647 3155
AlwNI	1	3596	Fnu4HI	39		ThaI	15	
ApaLI	2	3494 4740	FokI	3	4039 4220 4507	TseI	19	
ApoI	12		FspI	3	807 4295 5468	Tsp45I	5	1275 1334 4329 4540 5044
AvaI	2	1503 1561	HaeII	9	1472 1644 2518 2683 2785	Tsp509I	41	
Avall	3	1374 4211 4433			2827 3428 5067 5075	TspRI	10	838 2008 3082 3588 3601
AvrII	1	1588	HaeIII	14				3872 4021 4126 4473 4500
BamHI	1	1527	Hgal	11		VspI	5	20 128 1254 2169 4245
BanI	8	1407 2487 2514 2718 2769	HhaI	30		XhoI	1	1561
		2781 4021 5181	HincII	3	108 393 1169	XmnI	2	2225 4672
BanII	3	1504 1543 5151	HindIII	1	1546			
BbsI	2	646 2143	HinfI	10	304 594 1647 2023 3080			
BbvI	19				3155 3551 4068 5270 5292			
BcgI	2	2499 4578	HphI	11				
BcgI'	2	2465 4612	MaeIII	14				
BclI	1	1156	MbolI	15				
Bfal	11		MluI	1	547			
BglI	2	4193 5461	MnlI	29				
BglII	1	1161	MseI	44				
BpmI	1	4143	MslI	7	70 1098 2763 3027 4325			
Bpu10I	1	564			4484 4843			
Bpu1102I	1	1597	MspI	17				
BsaI	2	433 4134	MspA1I	8	803 1399 1421 2607 2787			
BsaAI	3	1280 1684 5222			3522 3767 4708			
BsaHI	7	643 1310 1962 2162 2515	MunI	4	1673 2018 2579 2944			
		2782 4610	MwoI	18				
BsaJI	6	1341 1370 1397 1503 1588	NarI	2	2515 2782			
		3340	NciI	6	1504 1505 1618 3560 4256			
BsaWI	5	981 2532 3386 3533 4364			4607			
BseRI	1	1503	NcoI	1	1370			
BsgI	3	2329 2623 2777	NgoAIV	2	929 5117			
BsiEI	7	1297 1556 3096 3520 4443	NheI	1	1471			
		4592 5489	NlaIII	13				
BsiHKAI	5	1543 1568 3498 4659 4744	NlaIV	19				
BsII	11		NottI	1	1553			
BsmI	1	85	NsiI	1	332			
BsmBI	2	1097 2534	NspI	3	114 1607 3184			
BsmFI	1	2090	PfiMI	1	1461			
Bsp1286I	10	1412 1504 1543 1568 2272	PinAI	1	2532			
		2772 3498 4659 4744 5151	PleI	7	298 2017 3074 3559 4062			
BspLU11I	1	3180			5278 5286			
BsrI	11		PmeI	1	3060			
BsrBI	5	2637 2932 3113 4914 5078	Psp1406I	3	4299 4672 5435			
BsrDI	3	227 4134 4308	PvuI	2	4443 5489			
BsrFI	6	929 2532 2724 2772 4153	RcaI	3	1186 3900 4908			
		5117	RsaI	11				
BsrGI	3	197 916 2014	SacI	1	1543			
BssSI	2	3353 4737	SacII	1	1400			
BstXI	1	315	Sall	3	106 391 1167			
BstYI	8	1161 1527 3821 3832 3918	Sau3AI	23				
		3930 4698 4715	Sau96I	7	1374 4115 4194 4211 4433			
Cac8I	24				5228 5496			
Clal	2	2656 2979	Scal	1	4553			
CviJI	66		ScrFI	11				
Ddel	8	564 1172 1597 2538 3455	SfaNI	6	339 2429 3277 4329 4520			
		3864 4030 4570			4769			
DpnI	23		Sfcl	5	3017 3445 3636 4314 4999			
DraI	7	45 577 1774 3060 3939	SgrAI	1	2772			
		3958 4650	SmaI	1	1505			
DrallI	1	5225	SnaBI	1	1684			
DrdI	2	3288 5269	SpeI	1	1323			
Dsal	2	1370 1397	SphI	1	1607			

Enzyme	# Sites	Locations
AflII	1	1505
BspMI	1	1505
EcoNI	1	1505
KpnI	1	1505
PacI	1	1505
PvuII	1	1505
SfiI	1	1505
UbaEI	1	1505

Enzymes that do not cut pBAC-5:

AflII	Apal	AscI	BsaBI	BspEI
BspMI	BssHII	Bst1107I	BstEII	Bsu36I
EcoNI	EcoO109I	EcoRV	FseI	HpaI
KpnI	MscI	NdeI	NruI	NspV
PacI	PmlI	PshAI	Psp5II	PstI
PvuII	RsrII	SanDI	SapI	SexAI
SfiI	SgfI	Sse8387I	SunI	Tth111I
UbaEI	XbaI	XcmI		