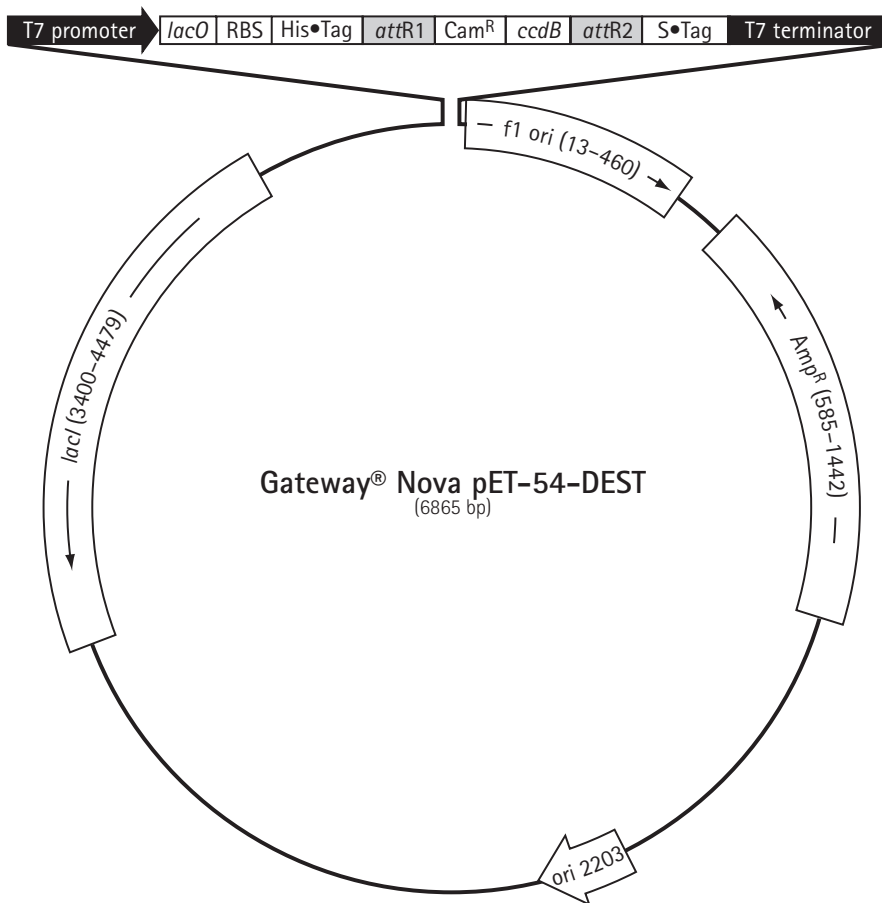


The Gateway® Nova pET-54-DEST™ vector is designed to create expression clones (pEXPR) that are fused to an N-terminal His•Tag® coding sequence. If the pENTR clone lacks a stop codon and is appropriately designed for a C-terminal fusion, the target gene in the resulting pEXPR clone will also be fused to a C-terminal S•Tag™ coding sequence. The S•Tag sequence allows quantification of the fusion protein using the FRETWorks™ assay (Cat. No. 70724). The tag can also be used for detection and, if a protease cleavage site is positioned upstream of the tag, for gentle purification.

Feature	Location	Cat No.
Gateway® Nova pET-54-DEST™ DNA		71845-3
f1 origin	13-460	
Amp <sup>R</sup>	585-1442	
pBR322 ori	2203	
<i>lacI</i> coding sequence	3400-4479	
T7 promoter	4870-4886	
T7 transcription start	4887	
His•Tag® coding sequence	4963-4980	
<i>attR1</i>	4984-5108	
CamR	5217-5873	
<i>ccdB</i>	6218-6520	
<i>attR2</i>	6564-6688	
S•Tag™ coding sequence	6693-6737	
T7 terminator	6793-6840	



### USA and Canada

Tel (800) 526-7319  
novatech@novagen.com

France  
Freephone  
0800 126 461

Germany  
Freecall  
0800 100 3496

Ireland  
Toll Free  
1800 409 445

United Kingdom  
Freephone  
0800 622 935

All other  
European Countries  
+44 115 943 0840

### All Other Countries

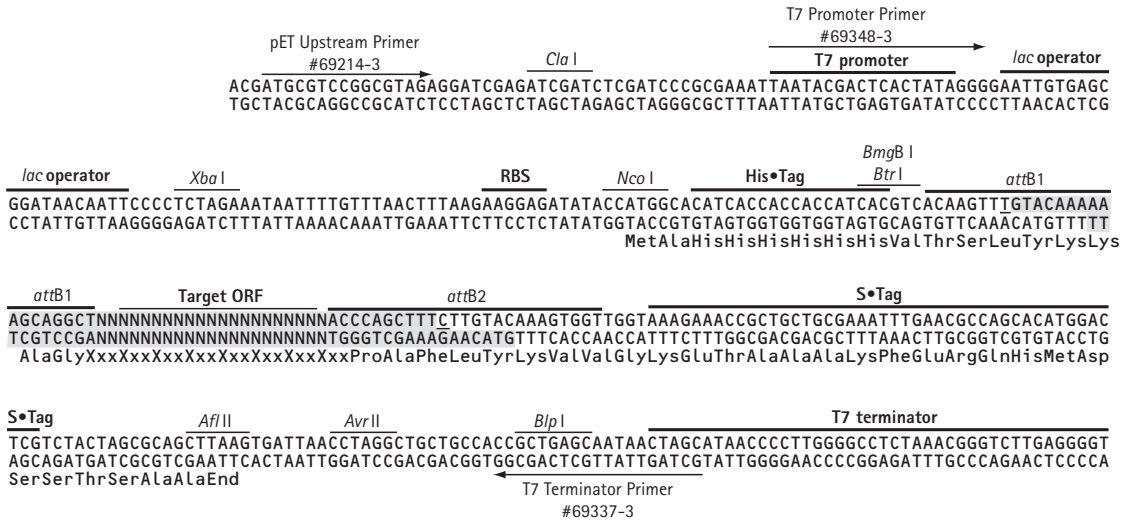
Contact Your Local Distributor  
www.novagen.com  
novatech@novagen.com

techservice@merckbio.eu

www.novagen.com

FOR RESEARCH USE ONLY. NOT FOR HUMAN OR DIAGNOSTIC USE.

### Sequence of pEXPR derivative



The DNA sequence shown above represents a pEXPR clone derived from a Clonase® LR reaction between a pENTR clone and Gateway® Nova pET-54-DEST™. The *Cam<sup>R</sup>* and *ccdB* genes between the original *attR1* and *attR2* regions of this DEST vector are replaced by the target gene from the pENTR clone during the recombination reaction between the *attR* and *attL* sequences. The open reading frame, fusion tags, and *attB* sites of the resulting pEXPR recombinant are detailed. The shaded regions correspond to those DNA sequences transferred from the entry clone into the DEST vector and the non-shaded regions are derived from the DEST vector. The underlined nucleotides flanking the shaded region correspond to bases 4991 and 6674 of the original Gateway Nova pET-54-DEST vector.

### Restriction sites in Gateway® Nova pET-54-DEST™

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations
AceII	9	399 955 2309 2611 2752	BspEI	3	3072 5427 6860	PciI	1	2261
AclI	6	3299 3630 4358 5446	BspHI	4	1460 1492 1541 4727	PfiMI	3	4550 5663 6729
AfeI	2	456 882 1255 2938 4465	BspLU111	1	2261	Ppil	3	282 1288 1555
AfII	1	5518	BspMI	1	6546	PsiI	1	371
AhdI	1	3011 4724	BsrBI	4	99 1498 2332 4900	Psp1406I	6	456 882 1255 2938 4465
Alol	1	6752	BsrDI	5	717 891 3718 4084 5450			5518
AlwNI	2	1852 6210	BsrGI	3	4992 6275 6677	PspOMI	1	3918
ApaBI	1	4450	BssHII	2	3714 5925	PstI	1	6557
Apal	1	3922	BssSI	2	1320 2088	PvuI	1	1026
ApaLI	5	1323 1947 2447 4145 6331	Bst1107I	2	2494 5966	PvuII	4	2674 3436 3529 5331
Asel	4	828 3383 3442 4870	BstAPI	1	4449	RcaI	4	1460 1492 1541 4727
AvrII	1	6765	BstEII	1	3943	Sall	1	6559
BamHI	2	5181 5884	BstXI	4	4079 4202 4331 6419	SapI	1	2378
Bbel	4	3490 4672 4786 4807	BstZ17I	2	2494 5966	Scal	2	1136 5848
Bbr7I	3	3148 3635 3974	BtrI	2	4981 6336	SfoI	4	3488 4670 4784 4805
BbsI	3	3143 3640 3979	BtsI	4	1056 1076 3398 3766	SgrAI	1	4806
BbvCI	1	6156	CjeI	14		SmaI	1	6302
BcgI	3	1195 2690 3805	CjePI	13		SphI	1	4658
BciVI	3	1494 2063 3673	Clal	1	4850	SrfI	1	6302
BclI	1	4111	DraI	5	522 541 1233 5351 5690	SspI	2	451 5743
BglI	1	776	DraIII	1	246	TaqII	5	341 1004 1189 2365 3332
BloHI	1	6557	DrdI	3	290 2159 2574	Tth111I	1	2519
BlpI	1	6783	EagI	1	5111	VspI	4	828 3383 3442 4870
BmgBI	2	4981 6336	EarI	3	1451 2378 4508	XbaI	1	4917
Bmrl	6	696 2527 3327 3967 4204	Ecil	4	799 2059 2205 4340	XcmI	3	3740 3758 4274
BpmI	5	726 2740 3804 4293 5553	Eco47III	2	3011 4724	XmaI	1	6300
Bpu10I	3	3156 5204 6156	Eco57I	2	1323 1719	XmnI	2	1255 2707
BpuEI	7	1261 1637 1878 2176 3317	EcoNI	1	4593			
		6030 6847	EcoRI	1	5431	Enzymes that do not cut:		
BsaBI	4	3068 4846 4856 6315	EcoRV	4	3488 4670 4784 4805	AarI		AatII
Bsal	1	717	EheI	4	3488 4670 4784 4805	Agel		Ascl
BsaXI	2	282 3457	FspI	1	878	BglII		BplI
BseYI	3	1957 3591 3726	HpaI	1	3623	BpII		BseRI
BsgI	3	3107 4080 4280	KasI	4	3486 4668 4782 4803	Bsu36I		BsiWI
BsmBI	3	2620 3510 5655	MluI	2	4125 5878	Ecl136II		BstBI
BsmI	2	5424 5831	MscI	3	5698 6327 6423	EcoI		Fall
Bsp24I	6	1567 1745 3959 4293 4812	NaeI	2	140 4817	FspAI		FelI
		6320	NarI	4	3487 4669 4783 4804	HindIII		FseI
			NcoI	1	4956	KpnI		FspI
			NgoAIV	2	138 4815	NheI		MunI
			NgoMIV	2	138 4815	NruI		NspV
			NotI	1	5111	PmeI		Pacl
						PmlI		PshAI
						RsrII		Psrl
						SacI		RleAI
						SacII		RseI
						SgfI		SbfI
						SmaI		Scil
						Sse8387I		SpeI
						Sse8647I		Sse232I
						StuI		XhoI
						SunI		
						Swal		
						Zral		