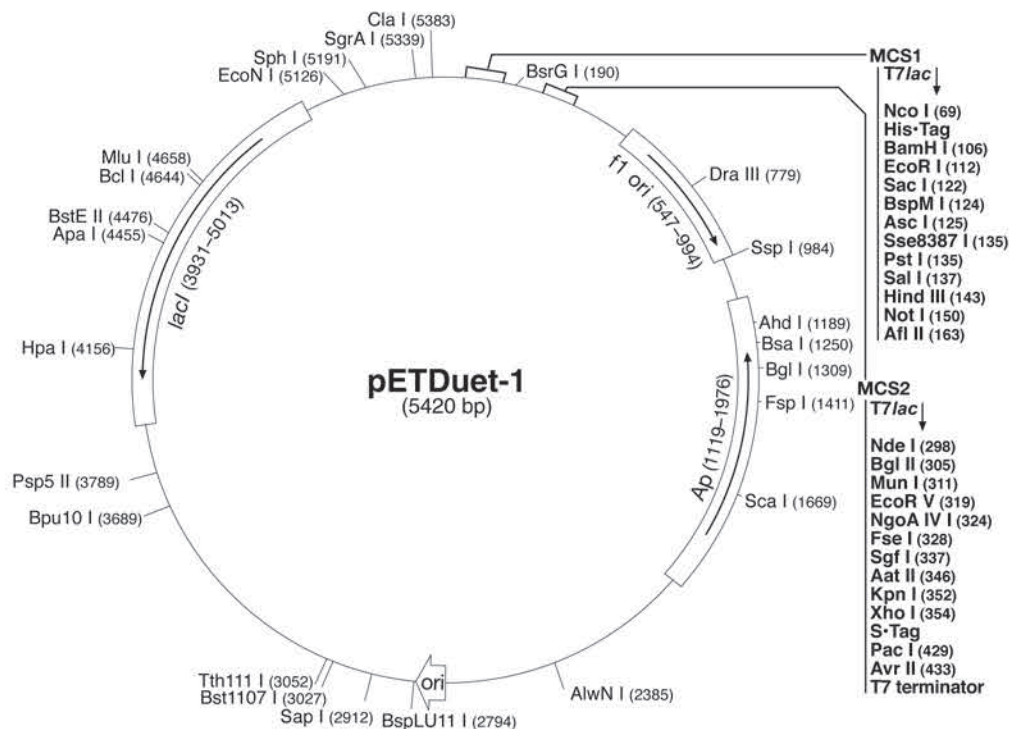


pETDuet-1 Vector

	Cat. No.
pETDuet-1 DNA	71146-3
pETDuet-1 sequence landmarks	
T7 promoter-1	5404-5420
T7 transcription start-1	1
His•Tag® coding sequence	83-100
Multiple cloning sites-1 (<i>Nco</i> I- <i>Afl</i> II)	69-168
T7 promoter-2	214-230
T7 transcription start-2	231
Multiple cloning sites-2 (<i>Nde</i> I- <i>Avr</i> II)	297-438
S•Tag™ coding sequence	366-410
T7 terminator	462-509
<i>lacI</i> coding sequence	3931-5013
pBR322 origin	2737
<i>bla</i> (Ap) coding sequence	1119-1976
f1 origin	547-994

pETDuet™-1 is designed for the coexpression of two target genes. The vector contains two multiple cloning sites (MCS), each of which is preceded by a T7 promoter/*lac* operator and a ribosome binding site (rbs). The vector also carries the pBR322-derived ColE1 replicon, *lacI* gene and ampicillin resistance gene. This vector can be used in combination with pACYCDuet™-1 (Cat. No. 71147-3) in an appropriate host strain for the coexpression of up to 4 target genes. Genes inserted into MCS1 can be sequenced using the pET Upstream Primer (Cat. No. 69214-3) and DuetDOWN1 Primer (Cat. No. 71179-3). Genes inserted into MCS2 can be sequenced using the DuetUP2 Primer (Cat. No. 71180-3) and T7 Terminator Primer (Cat. No. 69337-3).



pETDuet-1 cloning/expression regions

pETDuet-1 Restriction Sites

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations
AatII	1	346	DraI	3	1055 1074 1766	SfaNI	20	
AccI	3	138 411 3026	DraIII	1	779	Sfcl	7	131 226 553 1430 2338
Acil	78		DrdI	3	823 2692 3107			2529 5416
AflII	1	163	Dsal	2	69 5221	Sgfl	1	337
AflIII	2	2794 4658	EaeI	8	150 196 322 326 1577	SgrAI	1	5339
AhdI	1	1189			3984 5218 5350	SphI	1	5191
AluI	25		EagI	3	150 196 322	Sse8387I	1	135
Alw26I	7	1250 2027 3153 4043 4430	EarI	3	1984 2911 5041	Sspl	1	984
		4556 4961	Ecl136II	1	120	Styl	3	69 433 473
AlwI	15		Eco47III	2	3544 5257	TaiI	15	
AlwNI	1	2385	Eco57I	2	1856 2252	TaqI	16	
Apal	1	4455	EcoNI	1	5126	TfiI	4	2820 3241 3745 3980
ApalI	4	1856 2480 2980 4678	EcoO109I	3	478 3789 5226	Thal	34	
ApoI	5	112 384 959 970 4383	EcoRI	1	112	TseI	28	
AscI	1	125	EcoRII	8	102 2633 2646 2767 4022			
AvaI	1	354			4079 4619 4934	Tsp45I	7	598 1445 1656 3046 3141
Avall	5	1327 1549 3510 3789 4107	EcoRV	1	319			3354 4476
AvrII	1	433	EheI	4	4021 5203 5317 5338	Tsp509I	22	
BamHI	1	106	FauI	16		TspRI	13	
BanI	9	348 735 1137 3889 4019	Fnu4HI	48		Tth111I	1	3052
		4738 5201 5315 5336	FokI	10	1155 1336 1623 3108 3249	VspI	5	213 1361 3916 3975 5403
BanII	5	122 705 4455 5268 5282			3435 3513 3575 4603 4612	XbaI	1	30
BbsI	3	3676 4173 4512	FseI	1	328	XcmI	3	4273 4291 4807
BbvI	28		FspI	1	1411	XhoI	1	354
BcgI	4	162 1728 3223 4338	HaeII	13		XmnI	2	1788 3240
BclI	1	4644	HaeIII	24				
Bfal	10	31 415 434 462 623	HgaI	12		Enzymes that do not cut pETDuet-1:		
		1044 1379 2301 3782 3817	HhaI	44		BseRI	BsmI	Bsu36I
BglI	1	1309	HincII	2	139 4156	MscI	NheI	NruI
BglIII	1	305	HindIII	1	143	NsiI	PmlI	PshAI
BpmI	4	1259 3273 4337 4826	HinfI	16		RsrII	SacII	SanDI
Bpu10I	1	3689	HpaI	1	4156	SnaBI	SpeI	SrfI
Bpu1102I	1	451	HphI	18				StuI
BsaAI	2	776 3046	KpnI	1	352			SunI
BsaBI	3	3601 5379 5389	MaeIII	17				Swal
BsaHI	7	343 1726 4020 4703 5202	MbolI	13				
		5316 5337	MluI	1	4658			
Bsal	1	1250	MnII	25				
BsaJI	7	69 433 473 2634 4023	MseI	33				
		5215 5221	MslI	9	1441 1600 1959 3225 3616			
BsaWI	7	528 1480 2441 2588 3605			3811 4292 4322 4610			
		3836 4339	MspA1I	10	375 450 1824 2211 2456			
BsgI	3	3640 4613 4813			3088 3207 3969 4062 4632			
BsiEI	9	153 199 325 337 1559	MspI	29				
		1708 2460 2884 3879	MunI	1	311			
BsiHKAI	8	122 1775 1860 2484 2984	MwoI	34				
		3808 4682 5166	NarI	4	4020 5202 5316 5337			
BsII	22		NciI	12				
BsmBI	2	3153 4043	NcoI	1	69			
BsmFI	3	557 3523 5197	NdeI	1	298			
Bsp1286I	12		NgoAIV	3	324 671 5348			
BspEI	2	528 3605	NlaIII	26				
BspLU11I	1	2794	NlaIV	22				
BspMI	1	124	NotI	1	150			
BsrBI	5	13 243 632 2031 2865	NspI	4	2798 3165 3457 5191			
BsrDI	4	1250 1424 4251 4617	Pacl	1	429			
BsrFI	6	324 671 1269 4972 5339	PfIMI	2	401 5083			
		5348	PleI	12				
BsrGI	1	190	Psp1406I	5	989 1415 1788 3471 4998			
BsrI	24		Psp5II	1	3789			
BssHII	2	125 4247	PstI	1	135			
BssSI	2	1853 2621	PvuI	2	337 1559			
Bst1107I	1	3027	PvuII	3	3207 3969 4062			
BstEII	1	4476	RcaI	4	1993 2025 2074 5260			
BstXI	3	4612 4735 4864	RsaI	5	192 350 1669 2992 4515			
BstYI	11		SacI	1	122			
Cac8I	36		Sall	1	137			
Clal	1	5383	SapI	1	2911			
CviJI	84		Sau3AI	28				
Ddel	10	262 451 1146 1686 2111	Sau96I	15				
		2520 2987 3527 3689 4087	Scal	1	1669			
Dpnl	28		ScrFI	20				