

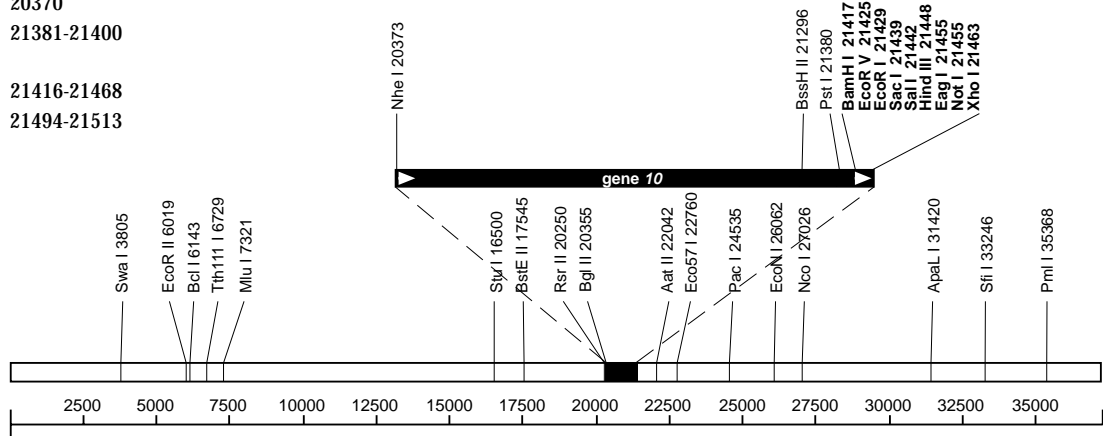
T7Select®1-2a, b and c Vectors

The T7Select®1-2a, b and c vectors are protein display vectors based on bacteriophage T7. The vector displays an average of 0.1–1 copies of peptides and proteins up to 900 aa in size on the surface of the T7 capsid. Target sequences are fused to the C-terminus of the 10B capsid protein near amino acid 348. T7Select1 phage are grown on a complementing host (BLT5403) that supplies large amounts of the 10A capsid protein from a plasmid. Capsids thus contain mostly 10A protein, along with 0.1–1 copy of 10B fusion protein per virion.

The linear genome of T7Select1-2a is 37,245 bp in size. Unique restriction sites are shown on the maps below (cloning sites are shown in **bold** type on the line map).

T7Select1-2a sequence landmarks

10B translation start	20370
T7SelectUP priming site	21381-21400
Multiple cloning region (<i>Bam</i> H I - <i>Xho</i> I)	21416-21468
T7SelectDOWN priming site	21494-21513



T7Select1-2a
(37,245bp)

The maps for T7Select1-2b and T7Select1-2c are the same as shown with the following exceptions: T7Select1-2b is 37,244 bp in size; subtract 1 bp from *Bam*H I and each site to its right. T7Select1-2c is 37,243 bp in size; subtract 2 bp from *Bam*H I and each site to its right.

T7SelectUP primer # 70005-3
Pst I → T7Select1-2a BamH I EcoR V EcoR I Sac I Sal I Hind III Eag I Not I Xho I

... GCTGCAGGAGCTGTCGTATCCAGTCCAGGTGTGATGCTCGGTGGATCCGATATCGAATTCGAGCTCCGTCGACAAGCTTGC GGCCGCACTCGAGTAACTAGTTAA
AlaAlaGlyAlaValValPheGlnSerGlyValMetLeuGlyGlySerAspIleGluPheGluLeuArgArgGlnAlaCysGlyArgThrArgValThrSerEnd
aa335 aa348 aa368

T7Select1-2b	... ATGCTCGGGATCCGATATCGAATTCGAGCTCCGTCGACAAGCTTGC GGCCGCACTCGAGTAACTAGTTAA ...MetLeuGlyAspProIleSerAsnSerSerSerValAspLysLeuAlaAlaLeuGluEnd aa348 aa365
T7Select1-2c	ATGCTCGGGATCCGATATCGAATTCGAGCTCCGTCGACAAGCTTGC GGCCGCACTCGAGTAACTAGTTAA MetLeuGlyIleArgTyrArgIleArgAlaProSerThrSerLeuArgProHisSerSerAsnEnd aa348 aa366

CCCCTTGGGGCCTCTAACGGGTCTTGAGGGTTTTTG
← T7SelectDOWN primer # 70006-3

T7Select1-2a-c cloning region

T7Select® 1-2a Restriction Sites

Enzyme	# Sites	Locations	Enzyme	# Sites	Locations	Enzyme	# Sites	Locations		
AatII	1	22042	DrdI	10	538 4041 4796 14682 15067 15534 29468 30318 32055 32229	SapI	4	7063 12268 17626 34363		
AccI	31		DsaI	25		Sau3AI	8	6143 6246 8994 11833 20355 21417 32992 33395		
AcII	180		EaeI	3	21455 32846 33247	Sau96I	78			
AflIII	16		EagI	1	21455	Scal	4	12996 31410 36160 36302		
AflIII	21		EarI	44		ScrFI	8	537 6021 12178 13153 19319 20596 25670 35030		
AhdI	12		Eco57I	1	22760	SfaNI	84			
AluI	135		EcoNI	1	26062	Sfcl	45			
AlwI	3	21412 21425 33403	EcoO109I	22		Sfil	1	33246		
Alw26I	90		EcoRI	1	21429	SnaBI	13			
AlwNI	16		EcoRII	1	6019	SpeI	3	5526 14758 21471		
ApaLI	1	31420	EcoRV	1	21425	Sspl	6	7446 24540 29839 32798 33263 33542		
ApoI	14		FauI	21		StuI	1	16500		
AvaI	5	8344 13381 21463 23427 27390	Fnu4HI	142		StyI	35			
Avall	54		FokI	88		Swal	1	3805		
AvrII	3	17483 28871 30530	FspI	6	1970 13144 22762 26174 27112 32623	TalI	162			
BamHI	1	21417	HaeII	25		TaqI	103			
BanI	32		HaeIII	65		TfiI	99			
BanII	2	17085 21439	Hgal	62		Thal	63			
BbsI	35		Hhal	94		Tsel	105			
BbvI	105		HincII	59		Tsp45I	102			
BcgI	19		HindIII	1	21448	Tsp509I	73			
BcgI'	19		Hinfl	209		TspRI	85			
BclI	1	6143	HpaI	18		Tth111I	1	6729		
Bfal	51		HphI	94		UbaEI	5	1780 6602 7218 7787 15214		
BglI	2	11002 33246	KpnI	5	41 3449 7024 21148 37126	VspI	10	387 435 8326 16006 16868 22129 24564 28150 32068 36519		
BglII	1	20355	MaeIII	202		XbaI	2	10309 31602		
Bpml	23		MbolI	133		XcmI	8	11613 14869 18274 18436 26603 26678 27024 27645		
Bpu10I	38		MluI	1	7321	XhoI	1	21463		
Bpu1102I	19		MnlI	315		XmnI	12			
BsaI	27		MscI	2	32848 33249	Enzymes that do not cut T7Select1-2a:				
BsaAI	35		MseI	190		Apal	AscI	BspEI	Eco47III	FseI
BsaBI	7	870 1015 4982 8993 16383 17468 34930	MslI	38		NgoAIV	PvuI	SacII	SexAI	SgfI
BsaHI	7	339 8773 8916 21599 22039 22964 32813	MspI	55		SgrAI	Smal	SphI	SrfI	Sse8387I
BsaJI	82		MspA1I	31		SunI				
BsaWI	32		MunI	8	3571 12057 15218 18907 19013 31470 32755 33695					
BseRI	10	10085 10097 14985 17441 19897 28314 28743 36392 36556 36702	MwoI	155						
BsgI	18		NarI	2	8916 32813					
BsiEI	17		NciI	7	537 12178 13153 19319 20596 25670 35030					
BsiHKAI	25		NcoI	1	27026					
BsII	89		NdeI	7	3507 4195 11786 17434 20368 25034 31039					
BsmI	13		NheI	1	20373					
BsmBI	14		NlaIII	133						
BsmFI	44		NlaIV	96						
Bsp1286I	39		NottI	1	21455					
BspLU111	6	799 12821 16621 16742 16788 34879	Nrul	3	1103 24874 26027					
BspMI	17		Nsil	7	6585 17469 19458 27309 35633 36446 36605					
BsrI	116		NspI	21						
BsrBI	15		NspV	5	3849 9639 16694 20341 28745					
BsrDI	15		Pacl	1	24535					
BsrFI	3	20796 33018 34773	PfIMI	8	7148 10863 16245 23165 32133 33337 33700 35342					
BsrGI	11		PinAI	2	33018 34773					
BssHII	1	21296	PleI	110						
BssSI	30		PmeI	2	276 8555					
Bst1107I	8	5511 16992 20734 21772 24447 25799 26079 36937	PmlI	1	35368					
BstEII	1	17545	PshAI	4	13548 26312 27041 35926					
BstXI	11		Psp1406I	18						
BstYI	3	20355 21417 33395	Psp5II	12						
Bsu36I	28		PstI	1	21380					
Cac8I	98		PvuII	2	11102 21581					
Clal	3	20336 24408 34388	Rcal	12						
CviJI	537		Rsal	159						
Ddel	272		RsrII	1	20250					
DpnI	8	6145 6248 8996 11835 20357 21419 32994 33397	SacI	1	21439					
Dral	9	276 441 3805 4333 8555 14350 17777 28679 37056	Sall	1	21442					
Drall	16		SanDI	3	12884 23703 25901					