SELECTION GUIDE – Vectors

Feature/Application	Prokaryotic Gene Fusion Vectors: GST Gene Fusion Vectors (see page 377)	Prokaryotic Gene Fusion Vectors: pEZZ 18 (see page 386)	General Cloning Vectors: pSL1180 (see page 260)	General Cloning Vectors: M13 Vectors (see page 259)	Gene Cartridge Vectors: pUC4K† (see page 260)	RPAS Vector: pCANTAB 5E (see page 0000)
Selectable Marker(s)	Amp	Amp	Amp		Amp	Amp
Blue/White Screening		X		X		
MCS (# unique sites)	vector-dependent	10	43	10		
f1 Origin			X	X		X
in vitro Transcription						
Prokaryotic Expression	X	X				X
Fusion Partner	GST	protein A				fd gene 3
Protease Cleavage Sites	X					
Promotor	*tac*	*spa lac*UV5		*lac*	Kan	*lac*
Induction	IPTG			IPTG		IPTG
RBS	X	X			X	X
ATG	X	X			X	X
Transcription Termination						
Translation Termination	X				X	X
Eukaryotic Expression						
Splicing/Polyadenylation						
Promotor Analysis						
Gene Cartridge					Kan	
cDNA Cloning						
Host Strains	*E coli* BL21 (included)	*E coli* β-gal α-acceptor	*E coli* F'	*E coli* F'	*E coli*	*E coli* TG1 & HB2151 (included)
Common Restriction Sites (# MCS Sites, where applicable/ Total # Sites in Plasmid)						
Acc I	*		2/2	1/1		0
Apa I	0/1	0	1/1	0		0
Ava I	*		2/3	0/2		1
*Bam*H I			1/1	1/1		2
Eag I	*	0/1	1/1	0		0
*Eco*R I			1/1	1/1		1
Hinc II	*		2/2	1/1		0
Hind III	0	1/1	1/1	1/1		1
Hpa I	0/1	0	1/1	0		0
Kpn I	0	1/1	1/1	1/1		0
Mlu I	0/1	0/2	1/1	0		0
Nco I	0	0	1/1	0		0
Nhe I	0	0/1	1/1	0		0
Not I	*	0/1	1/1	0		1
Pst I	0/1	1/1	1/1	1/1		0
Sac I	0	1/1	1/1	1/1		0
Sac II	0	0	1/1	0		0
Sal I	*	1/1	1/1	1/1		0
Sfi I	0	0	1/1	0		1
Sma I	*	1/1	1/1	1/1		0
Sph I	0	1/1	1/1	1/1		0
Ssp I	0/2	0/5	1/3	0/6		3
Xba I	0	1/1	1/1	1/1		0
Xho I	*	0	1/1	0		1
Xma I	*	1/1	1/1	1/1		0

Note: For high-level transformation of host cells (E. coli), we recommend the "Hanahan protocol" [Hanahan, D., J. Mol. Biol. 166, 557 (1983).]
** Sites are present in some but not all GST Fusion Vectors; consult map of specific vector of interest.*
† Restriction sites are not provided for pUC4K because the complete sequence of the vector is under dispute.

Important Note Concerning Patents
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