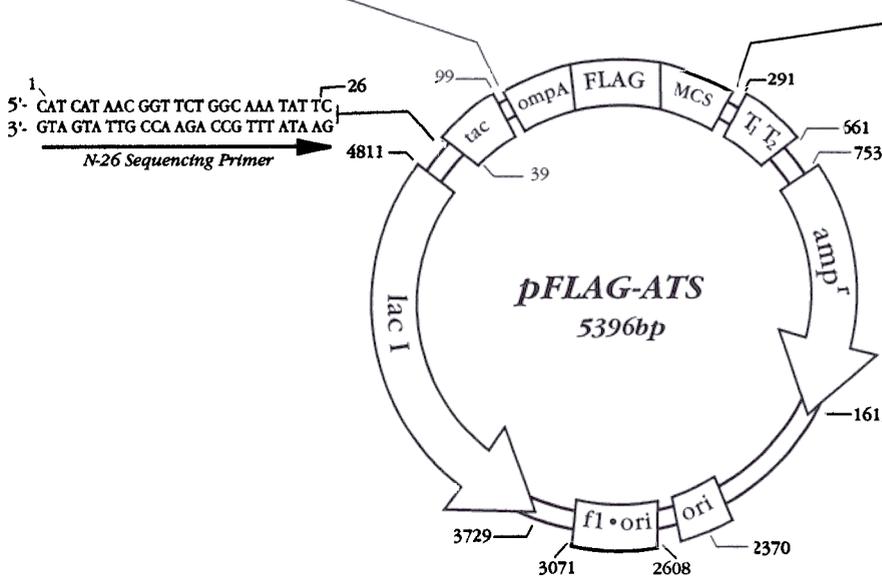
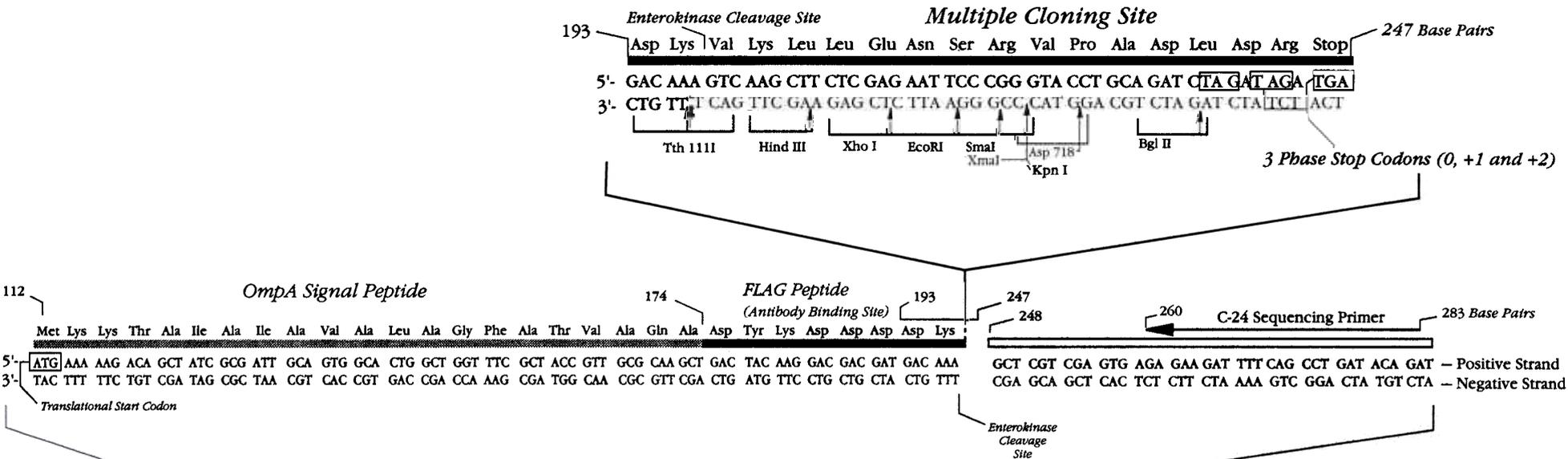


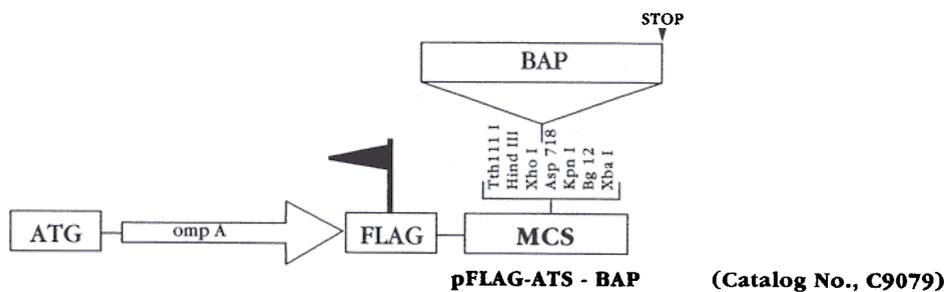
Periplasmic Expression of Amino-Terminal FLAG Fusion Proteins in *E. coli*



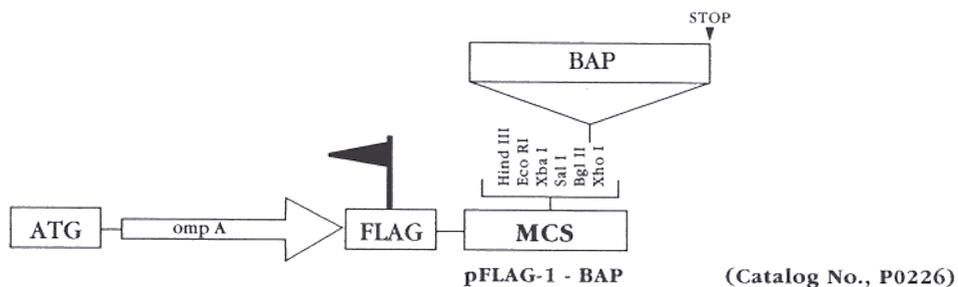
Map Position	Marker	Description
39-99	<i>tac</i> Promoter	-35 region of <i>trp</i> promoter to end of <i>lacI</i> binding region.
73	<i>lacI</i> Binding	<i>LacI</i> repressor binding site. Induction with IPTG.
100	RBS	Shine-Dalgarno ribosome binding site.
112-174	<i>ompA</i>	Signal sequence for secretion of FLAG fusion proteins to periplasmic space.
175-198	FLAG	Octapeptide for binding of ANTI-FLAG M1 and M2 antibodies and Enterokinase cleavage.
193-239	MCS	Multiple cloning site for insertion of coding sequences into pFLAG-ATS.
291-661	T ₁ T ₂	Ribosomal DNA operon compound terminator.
1-26	N-26	Binding site for N-26 forward sequencing primer.
283-260	C-24	Binding site for C-24 reverse sequencing primer.
753-1613	<i>amp^r</i>	Ampicillin resistance to host cell.
2370	<i>pBR322 ori</i>	Double strand replication of pFLAG-ATS.
2608-3071	<i>flori</i>	Single strand replication of positive strand of pFLAG-ATS via M13 K07 Helper Phage.
4811-3729	<i>lac I</i>	Repression of <i>tac</i> promoter. <i>LacI</i> repressor protein is over produced from <i>lacI^q</i> promoter. Induction with IPTG.

FLAG-BAP Positive Control Plasmids

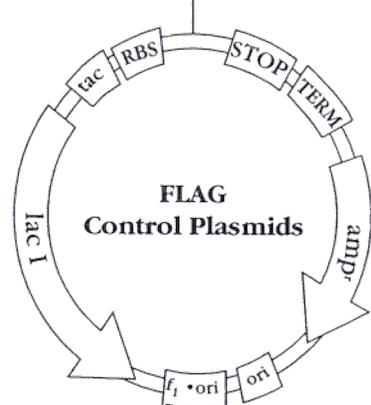
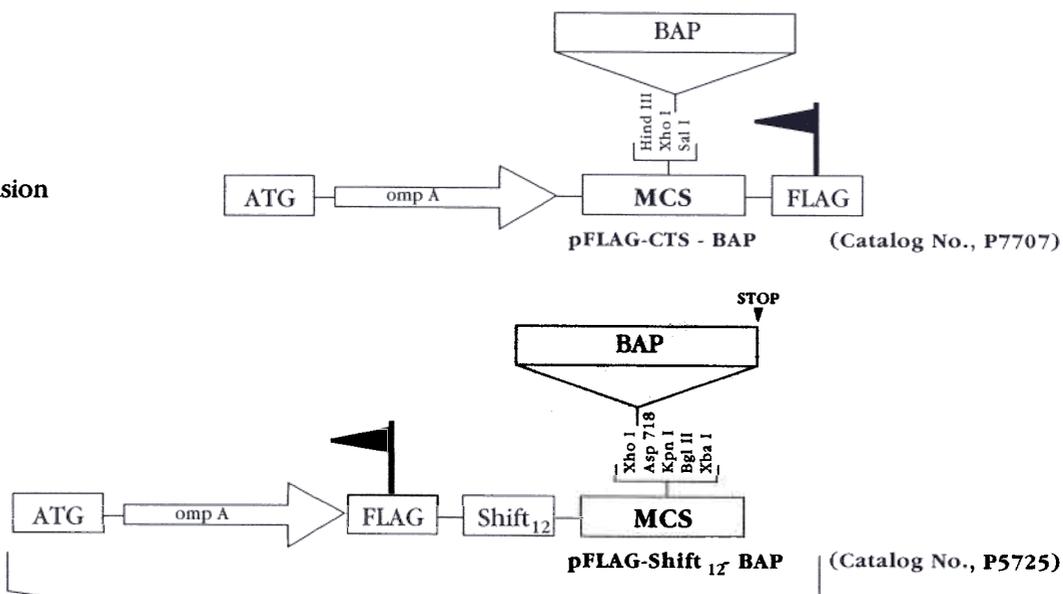
(a) Amino-Terminal Fusion



(b) Carboxy-Terminal Fusion



(c) FLAG-Shift Fusion



The FLAG-BAP Positive Control Plasmids are useful positive controls for protein expression, immunological detection and immuno-affinity purification of FLAG fusion proteins. ▼ STOP = Translational stop codon.