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(54) Title: BACTERIAL LEADER SEQUENCES FOR INCREASED EXPRESSION

(57) Abstract: Compositions and methods for improving expression and/or secretion of protein or polypeptide of interest in a host cell are provided. Compositions comprising a coding sequence for a bacterial secretion signal peptide are provided. The coding sequences can be used in vector constructs or expression systems for transformation and expression of a protein or polypeptide of interest in a host cell. The compositions of the invention are useful for increasing accumulation of properly processed proteins in the periplasmic space of a host cell, or for increasing secretion of properly processed proteins from the host cell. In particular, the secretion signal peptides comprise a protein disulfide isomerase C (dsbC), a mutant phosphate binding protein (pbp*), a protein disulfide isomerase A (dsbA), a CupA2, a CupB2,. a CupC2, a NikA, a FIgI, a tetratricopeptide repeat family protein (ORF5550), a toluene tolerance protein (Ttg2C), or a methyl accepting chemotaxis protein (ORF8124) secretion signal.

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