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(54) Title: CELL SURFACE DISPLAY OF POLYPEPTIDE ISOFORMS BY STOP CODON READTHROUGH

(57) Abstract: The present invention inter alia pertains to a method for generating or selecting a eukaryotic host cell expressing a desired level of a polypeptide of interest, comprising: a) providing a plurality of eukaryotic host cells comprising a heterologous nucleic acid comprising at least one cassette (Cas-POI) comprising at least a first polynucleotide (Pn-POI) encoding the polypeptide of interest, at least one stop codon down-stream of the first polynucleotide, and a second polynucleotide downstream of the stop codon encoding an immunoglobulin transmembrane anchor or a functional variant thereof; b) cultivating the eukaryotic host cells to allow expression of the polypeptide of interest such that at least a portion of the polypeptide of interest is expressed as a fusion polypeptide comprising the immunoglobulin transmembrane anchor or a functional variant thereof, wherein said fusion polypeptide is being displayed on the surface of said host cell; c) selecting at least one eukaryotic host cell based upon the presence or amount of the fusion polypeptide displayed on the cell surface. Also provided are host cells, comprising respectively designed heterologous nucleic acids and methods for producing a polypeptide using respective host cells.