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(54) Title: TARGET-SPECIFIC EXTRACELLULAR VESICLES

(57) Abstract: Provided herein is a method of producing a protein comprising a target-specific extravesicular domain (TED) of an extracellular vesicle (EV) surface protein comprising modifying a polynucleotide comprising a nucleotide sequence encoding the extravesicular domain (ED) of an EV surface protein by a mutagenesis method within at least one modified region within the ED amino acid sequence with a length of 3-20 contiguous amino acids flanked by regions of the wild-type ED sequence at its N- terminus and C-terminus, to incorporate a target binding site within the ED, thereby producing a repertoire of polynucleotides encoding a variety of TEDs, each comprising a different target binding site, and selecting a TED specifically recognizing a predetermined target, and producing the protein comprising the selected TED.



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