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(54) Title: FLOW CYTOMETRY ATTENUATED REPORTER EXPRESSION (FLARE) MULTIPLE REPORTER SYSTEM AND
METHODS OF USE THEREOF

(57) Abstract: Provided are compositions and methods for expressing a plurality of target polypeptides at a high level in mammalian host cells. Each target polypeptide is encoded on a polynucleotide comprising a nucleotide sequence encoding a unique cell surface marker polypeptide and a nucleotide sequence encoding a unique target polypeptide, wherein both the nucleotide sequence encoding the unique cell surface marker polypeptide and the nucleotide sequence encoding the unique target polypeptide are transcribed on the same mRNA. Each mammalian host cell comprises a plurality of different polynucleotides, such that the cell is capable of expressing a plurality of unique target polypeptides and a plurality of unique cell surface marker polypeptides. In certain embodiments, the plurality of unique cell surface marker polypeptides are variants of CD52. The compositions and methods are useful for expressing multimeric target proteins, e.g., crossover dual-variable domain (CODV) triabodies.



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