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(54) Title: RNA TRANS-SPLICING MOLECULE

(57) Abstract: This invention relates to an RNA trans- splicing molecule (RTM) that targets human endogenous retrovirus (HERV) pre-mRNA. The RTM comprises (i) a binding region specific for a HERV pre-mRNA, (ii) a trans- splicing splice domain and (iii) a coding sequence for a suicide protein. The binding region of the RTM binds to HERV pre-mRNA in a cell, such that the coding sequence is trans- spliced through the trans- splicing domain with the HERV pre-mRNA, resulting in a chimeric mRNA causing the suicide protein to be expressed in the cell. RTMs of the invention may be useful in selectively killing cells that express HERV genes, for example cancer cells. RTMs, encoding nucleic acids, methods of treatment and associated methods and uses are provided.



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