Title (en)

USE OF A PROLINE-RICH SEQUENCE TO IMPROVE THE FUSOGENIC CHARACTER OF RETROVIRAL ENVELOPES

Title (de)

VERWENDUNG VON EINER PROLINREICHEN SEQUENZ, UM DIE FUSOGENE EIGENSCHAFT VON RETROVIRALEN HÜLLPROTEINEN ZU ERHÖHEN

Title (fr)

UTILISATION D'UNE SEQUENCE RICHE EN PROLINE POUR AUGMENTER LE CARACTERE FUSOGENIQUE D'ENVELOPPES DE RETROVIRUS

Publication

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Application

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Abstract (en)

[origin: FR2773561A1] A proline-rich sequence corresponding to an envelope glycoprotein that has at least one mutation that prevents formation of at least one beta -turn in the polyproline helix, is new. A proline rich sequence has an amino acid sequence and secondary structure corresponding to that of a proline rich sequence of an envelope glycoprotein of an MLV amphotrope, retroviral MLV 10A1, MLV MCF, GALV, MLV xenotrope or FeLV. The sequence comprises at least one mutation, optionally in the C- or N-terminal region, such that it suppresses at least one beta -turn in the polyproline helix of the proline rich sequence. Independent claims are also included for the following: (1) a mutant protein corresponding to a glycoprotein envelope as above, in that a proline rich domain comprises: (a) at least one mutation such that at least one beta -turn in the polyproline helix is suppressed; or (b) is replaced with a proline rich domain of an MLV ecotropic retroviral glycoprotein envelope; and (2) a chimeric protein corresponding to a glycoprotein envelope as above, in that: (a) the proline-rich domain is replaced by the proline-rich domain of the envelope glycoprotein of a retroviral MLV ecotrope; or (b) the proline-rich domain comprises at least one mutation that suppresses a beta -turn (in the polyproline helix); and (c) at least one of the functional domains chosen from the linker domain, C domain or the transmembrane domain is replaced with a domain corresponding to the envelope of an ecotropic MLV.

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