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(54) Title: TEMPLATE-FIXED PEPTIDOMIMETICS

(57) Abstract: The template-fixed β -hairpin peptidomimetics Cyclo(-Tyr-His-X-Cys-Ser-Ala-^DPro- Dab-Arg-Tyr-Cys-Tyr-Gln-Lys-^DPro-Pro), disulfide bond between Cys4 and Gys11, and pharmaceutically acceptable salts thereof, with X being Ala or Tyr, have CXCR4 antagonizing properties and can be used for preventing HIV infections in healthy individuals or for slowing and halting viral progression in infected patients; or where Cancer is mediated or resulting from CXCR4 receptor activity; or where immunological diseases are mediated or resulting from CXCR4 receptor activity; or for treating immuno suppression; or, in particular, for stem cell mobilisation of peripheral blood stem cells and/or mesenchymal stem cell (MSC) and/or other stem cells which retention depend on the CXCR4-receptor. These β -hairpin peptidomimetics can be manufactured by a process which is based on a mixed solid- and Solution phase synthetic strategy, using methods which are well known to those adequately skilled in peptide chemistry.

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