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(54) Title: PROTEIN-BASED CONJUGATION CARRIERS FOR INTRANUCLEAR DELIVERY

(57) Abstract: The present technology relates to the field of drug delivery and provides molecules comprising or consisting of at least one protein-based carrier building block, wherein the protein-based carrier building block comprises at least one, preferably at least two, attachment point(s) or conjugation site(s). In particular, the technology provides a molecule comprising at least one protein-based building block, wherein the at least one protein-based building block: a) comprises at least one conjugation site or attachment point; b) has a molecular mass of 2.5 to 70 kDa; c) has a globular three-dimensional (3D) structure; d) has a solubility of 10 mg/mL or more, measured in an aqueous solution at room temperature; and does not specifically bind to any human protein or binds one or more human proteins with a K_D value greater than 5×10^{-4} mol/litre, wherein the molecule further comprises at least one nuclear localization sequence (NLS), covalently linked, directly or by means of a linker, to at least one conjugation site or attachment point comprised in the protein-based carrier building block, wherein the NLS preferably comprises or consists of SEQ ID NO.: 221.



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