

Title (en)

POLYGLUTAMIC ACIDS FUNCTIONALIZED BY CATIONIC GROUPS AND HYDROPHOBIC GROUPS AND APPLICATIONS THEREOF, IN PARTICULAR THERAPEUTIC APPLICATIONS THEREOF

Title (de)

DURCH KATIONISCHE GRUPPEN UND HYDROPHOBE GRUPPEN FUNKTIONALISIERTE POLYGLUTAMINSÄUREN UND ANWENDUNGEN DAVON, INSBESONDERE THERAPEUTISCHE ANWENDUNGEN DAVON

Title (fr)

ACIDES POLYGLUTAMIQUES FONCTIONNALISES PAR DES GROUPEMENTS CATIONIQUES ET DES GROUPEMENTS HYDROPHOBES ET LEURS APPLICATIONS, NOTAMMENT THERAPEUTIQUES

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2008135563A1] The present invention relates to novel biodegradable materials based on modified polyamino acids that can be used, in particular, for the vectorization of active principle(s) (PA). The invention also relates to novel pharmaceutical, cosmetic, dietetic or phytosanitary compositions based on these polyamino acids. The objective of the invention is to provide a novel polymer starting material that is capable of being used for the AP vectorization and that makes it possible to optimally satisfy all the specifications required in the case in point: biocompatibility, biodegradability, ability to associate easily with numerous active principles or to dissolve them, and to release these active principles in vivo. This objective is achieved by the present invention, which relates to novel polyglutamates modified by cationic groups that, if they can be deprotonated, have a pKa greater than or equal to 7, and by hydrophobic groups comprising from 8 to 30 carbon atoms. These polyglutamates modified by cationic groups are capable of being easily and economically converted into particles for the vectorization of active principles, these particles being themselves capable of forming stable aqueous colloidal suspensions. These modified polyglutamates have the advantage of being less viscous than other similar polymers, while retaining an ability to associate proteins such as insulin. Some are soluble in water at acid pH and become insoluble at physiological pH (7.4) and should therefore, during a subcutaneous injection, precipitate at the injection site.

IPC 8 full level

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