

Title (en)

MODIFIED-RELEASE PARTICLES BASED ON POLYELECTROLYTES AND ON AN ACTIVE PRINCIPLE AND PHARMACEUTICAL FORMULATIONS CONTAINING THESE PARTICLES

Title (de)

TEILCHEN MIT MODIFIZIERTER FREISETZUNG AUF BASIS VON POLYELEKTROLYTEN UND AUF EINEM WIRKSTOFF SOWIE DIESE TEILCHEN ENTHALTENDE PHARMAZEUTISCHE FORMULIERUNGEN

Title (fr)

PARTICULES A BASE DE POLYELECTROLYTES ET DE PRINCIPE ACTIF A LIBERATION MODIFIEE ET FORMULATIONS PHARMACEUTIQUES CONTENANT CES PARTICULES

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2008135561A1] The present invention relates to novel polyelectrolyte polymer particles for transporting an active principle (AP), in particular a protein and peptide active principle, and also to novel modified-release pharmaceutical formulations containing said AP microparticles. These novel AP-loaded particles release the AP over a prolonged duration of several days, or even several weeks. The invention relates, in a first aspect, to particles comprising: a) a first polyelectrolyte polymer (PE1) in the charged state, bearing side hydrophobic groups (HG), said first polyelectrolyte polymer (PE1) spontaneously forming, in water, a colloidal solution of particles at at least a value pH<sub>m</sub> of the pH between 3 and 8; b) a second polyelectrolyte polymer (PE2) of opposite polarity to that of the first polyelectrolyte polymer (PE1), said second polyelectrolyte polymer (PE2) forming, in water, a solution or a colloidal solution at at least said pH<sub>m</sub> value of the pH; c) at least one active principle (AP) combined non-covalently with the particles of the colloidal solution of the first polyelectrolyte polymer (PE1); said particles being obtained by mixing, at a pH equal to pH<sub>m</sub>, of the first polyelectrolyte polymer (PE1) in the form of a colloidal solution of particles combined with the active principle (AP) with the second polyelectrolyte polymer (PE2) in the form of a solution or a colloidal solution. The invention also relates to the process for preparing these particles, a pharmaceutical formulation comprising such particles and a process for preparing medications.

IPC 8 full level

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