

Polypeptide ligands for targeting cartilage



Ref. Nr

6.0695

Keywords

Peptide, cartilage,
targeting, therapeutic
agent, drug delivery

Intellectual Property

US7,592,009

Date

21/12/2023

Description

Pure polypeptides ligands for cartilage injury which specifically bind cartilage tissue. Such polypeptides may also include a therapeutic agent as delivery system for nanoparticles having an average diameter between about 10 nm and about 200 nm, wherein the nanoparticles comprise the therapeutic agent and the polypeptide ligand.

Advantages

Therapeutic agents such as therapeutic polypeptides can be furnished with targeting capability by the use of the polypeptide ligands and advantageously exhibit longer retention times in a joint, for instance by making a fusion protein of a polypeptide ligand and a therapeutic protein. By designing gene specific primers for the therapeutic polypeptide to be expressed, the polypeptide ligands can be attached to the N- or C-terminus in normal or reverse order.

Applications

- targeted delivery of a therapeutic agent to articular cartilage
- tissue delivery of therapeutic agent