Title (en)

CHELATOR MODIFIED MAGNETIC SILICA NANOPARTICLES, THEIR USE AND PREPARATION

Title (de)

CHELATMODIFIZIERTE MAGNETISCHE SILICIUMDIOXIDPARTIKEL, DEREN VERWENDUNG UND HERSTELLUNG

Title (fr)

NANOPARTICULES CHÉLATRICES DE SILICE MAGNÉTIQUE MODIFIÉE, LEUR UTILISATION ET LEUR PRÉPARATION

Publication

EP 3137485 A1 20170308 (EN)

Application

EP 15727465 A 20150428

Priority

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Abstract (en)

[origin: WO2015166415A1] The present solution relates to magnetic probes/nanoprobes (NP) for the selective enrichment of proteins. Namely, the solution relates to magnetic nanoparticles, which surface is chemically modified with metal ion chelation groups. The use of these magnetic nanoparticles allows the separation of specific proteins from complex mixtures by means of a magnetic field, namely proteins containing metal ions in their composition, such as metalloproteases, and the recovery of metal binding proteins, such as histidine-tagged recombinant proteins. This solution describes a probe for select metalloproteins in a solution comprising at least an inorganic magnetic core particle comprising a paramagnetic, superparamagnetic or ferromagnetic material; wherein such particle is coated with a siliceous coating; wherein the siliceous coating further comprises a plurality of metal ion chelating moieties; wherein the size of the probe is less than 1100 nm. Furthermore, this disclosure also describes a method for producing said probe.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2015166415A1

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