

Title (en)

NANOSTRUCTURES COMPRISING COBALT PORPHYRIN-PHOSPHOLIPID CONJUGATES AND POLYHISTIDINE-TAGS

Title (de)

NANOSTRUKTUREN MIT KOBALTPORPHYRIN-PHOSPHOLIPID-KONJUGATEN UND POLYHISTIDIN-TAGS

Title (fr)

NANOSTRUCTURES COMPRENANT DES CONJUGUÉS PORPHYRINE DE COBALT-PHOSPHOLIPIDE ET DES ÉTIQUETTES POLYHISTIDINE

Publication

EP 3962477 A4 20230503 (EN)

Application

EP 20798748 A 20200429

Priority

- US 201916399581 A 20190430
- US 2020030537 W 20200429

Abstract (en)

[origin: WO2020223395A1] The present disclosure provides nanostructures (e.g., monolayer or bilayer nanostructures) comprising porphyrins with cobalt chelated thereto such that the cobalt metal resides within monolayer or bilayer in the porphyrin macrocycle. The nanostructures can have presentation molecules comprising epitopes from microorganisms with a histidine tag attached thereto, such that at least a part of the his-tag is within the monolayer or bilayer and coordinated to the cobalt metal core and the presentation molecules are exposed to the outside of the nanostructures. The nanostructures can further comprise a cargo. The nanostructures can be used to deliver the cargo to an individual.

IPC 8 full level

A61K 47/69 (2017.01); **A61K 31/409** (2006.01); **A61K 38/16** (2006.01); **A61K 38/41** (2006.01); **A61K 47/54** (2017.01); **A61P 31/14** (2006.01); **A61P 31/18** (2006.01)

CPC (source: EP)

A61K 31/409 (2013.01); **A61K 38/1767** (2013.01); **A61K 38/41** (2013.01); **A61K 39/015** (2013.01); **A61K 39/0225** (2013.01); **A61K 39/12** (2013.01); **A61K 47/544** (2017.07); **A61K 47/6911** (2017.07); **A61P 31/14** (2017.12); **A61P 31/18** (2017.12); **A61K 2039/55566** (2013.01); **A61K 2039/55572** (2013.01); **A61K 2039/55594** (2013.01); **C12N 2740/16134** (2013.01); **C12N 2760/18534** (2013.01)

Citation (search report)

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- [Y] WO 2018170260 A1 20180920 - MODERNATX INC [US], et al
- [A] WO 2017176833 A1 20171012 - UNIV NEW YORK STATE RES FOUND [US]
- [X] SHAO SHUAI ET AL: "Functionalization of cobalt porphyrin-phospholipid bilayers with his-tagged ligands and antigens", NATURE CHEMISTRY, vol. 7, no. 5, 20 April 2015 (2015-04-20), London, pages 438 - 446, XP093034593, ISSN: 1755-4330, Retrieved from the Internet <URL:<http://www.nature.com/articles/nchem.2236>> DOI: 10.1038/nchem.2236
- [A] KEVIN A. CARTER ET AL: "Functionalization of cobalt porphyrin-phospholipid bilayers with his-tagged ligands and antigens", NATURE COMMUNICATIONS, vol. 5, no. 1, 3 April 2014 (2014-04-03), XP055528852, DOI: 10.1038/ncomms4546
- See references of WO 2020223395A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2020223395 A1 20201105; AU 2020266139 A1 20211202; CA 3138856 A1 20201105; CN 114502159 A 20220513; EP 3962477 A1 20220309; EP 3962477 A4 20230503; JP 2022530539 A 20220629

DOCDB simple family (application)

US 2020030537 W 20200429; AU 2020266139 A 20200429; CA 3138856 A 20200429; CN 202080048088 A 20200429; EP 20798748 A 20200429; JP 2021564509 A 20200429