Accepted Manuscript

Title: Aptamers as smart ligands for nano-carriers targeting

Author: Ahad Mokhtarzadeh, Maryam Tabarzad, Javad Ranjbari, Miguel de la Guardia, Maryam Hejazi, Mohammad Ramezani

PII: S0165-9936(16)30127-3

DOI: http://dx.doi.org/doi: 10.1016/j.trac.2016.06.018

Reference: TRAC 14790

To appear in: Trends in Analytical Chemistry



Please cite this article as: Ahad Mokhtarzadeh, Maryam Tabarzad, Javad Ranjbari, Miguel de la Guardia, Maryam Hejazi, Mohammad Ramezani, Aptamers as smart ligands for nano-carriers targeting, *Trends in Analytical Chemistry* (2016), http://dx.doi.org/doi: 10.1016/j.trac.2016.06.018.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

1 Aptamers as smart ligands for nano-carriers targeting

2

Ahad Mokhtarzadeh^{a, b,c} *, Maryam Tabarzad^d *, Javad Ranjbari^e, Miguel de la Guardia*^f, Maryam Hejazi^g, Mohammad Ramezani**^c

5

6

19

21

Ran**26**zanim@mums.ac.ir (Mohammad Ramezani)

26

Abbz eviations

Actinium isotope 225

Bcl-xl B-cell lymphoma-extra large transmembrane protein

CD Cluster of differentiation

CNTs Carbon nanotubes

CTLA 4 cytotoxic T-lymphocyte-associated protein 4

Dox Doxorubicin

EpCAm Epithelial cell adhesion molecule

EPR Enhanced permeability and retention effect

FDA Food and Drug Administration
FluMag SELEX Fluorescence magnetic bead SELEX

HAPI-Screen High throughput APtamer Identification-screen HER-2 human epidermal growth factor receptor 2

IL-6 Interleukin-6 IR Infra-red

LNCaP cell line Cells established from a metastatic lymph node lesion of human

^aResearch Center for Pharmaceutical Nanotechnology, Tabriz University of Medical Sciences, Tabsiz, Iran

^b Department of Biotechnology, Higher Education Institute of Rab-Rashid, Tabriz, Iran

^c Pharmaceutical Research Center, Department of Pharmaceutical Biotechnology, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad, Iran

^dProtein Technology Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran13

^ePharamaceutical biotechnology department, school of pharmacy, Shahid Beheshti University of Medisal Sciences, Tehran, Iran.

f Department of Analytical Chemistry, University of Valencia, Dr. Moliner 50, 46100 Burjassot, Valancia, Spain

^g School of Medicine, Gonabad University of Medical Sciences, Gonabad, Iran

[#] Th29e authors contributed equally to this work

^{*}Co22esponding authors.

^{*} Migael de la Guardia: Miguel.delaguardia@uv.es

^{**}Mahammad Ramezani : Tel.: +98 5137112470; Fax: +98 5138823251.E-mail addresses:

Download English Version:

https://daneshyari.com/en/article/7688427

Download Persian Version:

https://daneshyari.com/article/7688427

<u>Daneshyari.com</u>