Accepted Manuscript

Shifted Golgi targeting of glycosyltransferases and α-mannosidase IA from giantin to GM130-GRASP65 results in formation of high mannose *N*-glycans in aggressive prostate cancer cells

Ganapati Bhat, Vishwanath-Reddy Hothpet, Ming-Fong Lin, Pi-Wan Cheng

PII: S0304-4165(17)30251-9
DOI: doi:10.1016/j.bbagen.2017.08.006
Reference: BBAGEN 28914

To appear in: *BBA - General Subjects*

Received date: 8 March 2017
Revised date: 1 August 2017
Accepted date: 3 August 2017

Please cite this article as: Ganapati Bhat, Vishwanath-Reddy Hothpet, Ming-Fong Lin, Pi-Wan Cheng, Shifted Golgi targeting of glycosyltransferases and α-mannosidase IA from giantin to GM130-GRASP65 results in formation of high mannose *N*-glycans in aggressive prostate cancer cells, *BBA - General Subjects* (2017), doi:10.1016/j.bbagen.2017.08.006

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

Shifted Golgi targeting of glycosyltransferases and α-mannosidase IA from giantin to GM130-GRASP65 results in formation of high mannose N-glycans in aggressive prostate cancer cells

Ganapati Bhat[1,2], Vishwanath-Reddy Hothpet[1,2], Ming-Fong Lin[2,3], and Pi-Wan Cheng[1,2,3,*]

[1]Veterans Affairs Nebraska and Western Iowa Healthcare System, Omaha, NE, USA and [2]Department of Biochemistry and Molecular Biology, College of Medicine, University of Nebraska Medical Center, Omaha, NE, USA and [3]Eppley Institute of Research in Cancer and Allied Diseases, Fred & Pamela Cancer Center, University of Nebraska Medical Center, Omaha, NE, USA.

[*]**Correspondence:** Prof. Pi-Wan Cheng, Ph.D., Department of Biochemistry and Molecular Biology, College of Medicine, University of Nebraska Medical Center, Omaha, NE 68198-5870, USA, Tel #: 402 559-5776, E-mail: pcheng@unmc.edu

Abbreviations: β4GalT1, GlcNAc: β4-galactosyltransferase 1; Man IA, α-mannosidase IA; Mgat1, mannosyl (α1,3)-glycoprotein: β2N-acetylglucosaminyltransferase; Man II, α-mannosidase II; Mgat2mannosyl (α1,6)-glycoprotein: β2N-acetylglucosaminyltransferase; C2GnT, core 2 N-acetylglucosaminyltransferase;, ST3GalT1, Galβ3GalNAc:α2,3sialyltransferase 1; GRASP65, Golgi Reassembly Stacking Protein 1; GM130, Golgi matrix protein 130; NMIIA, non-muscle myosin IIA; PLA, proximity ligation assay; C1GalT1, core 1 synthase; Maldi-Tof-MS, Matrix-assisted laser desorption ionization-time of flight-mass spectrometry; GNL, *Galanthus nivalis* lectin; Co-IP, Co-Immunoprecipitation.

Download English Version:

https://daneshyari.com/en/article/5507879

Download Persian Version:

https://daneshyari.com/article/5507879

Daneshyari.com