

## Author's Accepted Manuscript

A barcode mode based on glycosylation sites of membrane type mannose receptor as a new potential diagnostic marker for breast cancer

Jing Fang, Tao Tao, Ying Zhang, Haojie Lu



[www.elsevier.com/locate/talanta](http://www.elsevier.com/locate/talanta)

PII: S0039-9140(18)30833-6  
DOI: <https://doi.org/10.1016/j.talanta.2018.08.022>  
Reference: TAL18943

To appear in: *Talanta*

Received date: 23 April 2018  
Revised date: 28 July 2018  
Accepted date: 5 August 2018

Cite this article as: Jing Fang, Tao Tao, Ying Zhang and Haojie Lu, A barcode mode based on glycosylation sites of membrane type mannose receptor as a new potential diagnostic marker for breast cancer, *Talanta*, <https://doi.org/10.1016/j.talanta.2018.08.022>

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 galley proof before it is published in its final citable 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.

# A barcode mode based on glycosylation sites of membrane type mannose receptor as a new potential diagnostic marker for breast cancer

Jing Fang<sup>1</sup>, Tao Tao<sup>1</sup>, Ying Zhang<sup>1,3</sup>, Haojie Lu<sup>1,2,3\*</sup>

<sup>1</sup>Shanghai Cancer Center and Institutes of Biomedical Sciences, Fudan University, Shanghai, 200032, P. R. China

<sup>2</sup>Department of Chemistry, Fudan University, Shanghai, 200433, P. R. China

<sup>3</sup>Key Laboratory of Glycoconjugates Research Ministry of Public Health, Fudan University, Shanghai 200032, P. R. China

\*Corresponding author. Haojie Lu, luhaojie@fudan.edu.cn

## Abstract

Breast cancer is recognized as a heterogeneous cancer in female patients worldwide. The discovery of a new biomarker for breast cancer diagnosis is urgently needed.

According to our preliminary molecular biology experiment data, we discovered that the membrane type mannose receptor (MR) was highly expressed in breast cancer patients serum, and not detected in normal human serum. Because membrane type MR was differentially expressed in four types of breast cancer, we assume that membrane type MR could be used to distinguish four types of breast cancer. Therefore, we systematically analyzed the glycosylation of membrane type MR by mass spectrometry. Six glycosylation sites were identified, among them five were newly identified in this study. A barcode mode was established based on these six glycosylation sites. Based on the barcode mode, four types of breast cancer could be

Download English Version:

<https://daneshyari.com/en/article/8942722>

Download Persian Version:

<https://daneshyari.com/article/8942722>

[Daneshyari.com](https://daneshyari.com)