Accepted Manuscript

Title: Colorimetric detection of hydrogen sulfide based on terbium-G-quadruplex-hemin DNAzyme

Author: Gonge Tang Cailan Zhao Jie Gao<ce:author

id="aut0020" biographyid="vt0020"

orcid="0000-0001-6026-9288"> Hongliang Tan

PII: S0925-4005(16)31024-3

DOI: http://dx.doi.org/doi:10.1016/j.snb.2016.06.162

Reference: SNB 20488

To appear in: Sensors and Actuators B

Received date: 11-4-2016 Revised date: 27-6-2016 Accepted date: 29-6-2016

Please cite this article as: Gonge Tang, Cailan Zhao, Jie Gao, Hongliang Colorimetric terbium-Tan. detection of hydrogen sulfide based on G-quadruplex-hemin Sensors B: Chemical DNAzyme, and Actuators http://dx.doi.org/10.1016/j.snb.2016.06.162

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

Colorimetric detection of hydrogen sulfide based on terbium-G-quadruplex-hemin DNAzyme

Gonge Tang, Cailan Zhao, Jie Gao, Hongliang Tan*

Key Laboratory of Functional Small Organic Molecule, Ministry of Education, Key Laboratory of Chemical Biology, Jiangxi Province, College of Chemistry and Chemical Engineering, Jiangxi Normal University, Nanchang, 330022, P R China

 $*Corresponding \ author: E-mail: \underline{hltan@jxnu.edu.cn}\\$

Highlights

- Terbium-G-quadruplex-hemin complex shows high peroxidase-like activity.
- A simple colorimetric method for H₂S detection was developed.
- The colorimetric displays excellent sensitivity and selectivity to H₂S.
- Tb/G4-hemin DNAzyme can be cyclically used for colorimetric detection of H₂S.

Download English Version:

https://daneshyari.com/en/article/7142907

Download Persian Version:

https://daneshyari.com/article/7142907

Daneshyari.com