Accepted Manuscript

Title: Hydrophilicity nano-titania coating modified magnetic graphene oxide for pass-through cleanup of fipronil and its metabolites in human blood

Authors: Shi-Wei He, Yong-Gang Zhao, Yun Zhang, Mi-Cong Jin, Yan Zhu

PII:	S0021-9673(18)30438-2
DOI:	https://doi.org/10.1016/j.chroma.2018.04.019
Reference:	CHROMA 359318
To appear in:	Journal of Chromatography A
Received date:	18-12-2017
Revised date:	5-4-2018
Accepted date:	7-4-2018

Please cite this article as: Shi-Wei He, Yong-Gang Zhao, Yun Zhang, Mi-Cong Jin, Yan Zhu, Hydrophilicity nano-titania coating modified magnetic graphene oxide for pass-through cleanup of fipronil and its metabolites in human blood, Journal of Chromatography A https://doi.org/10.1016/j.chroma.2018.04.019

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

Hydrophilicity nano-titania coating modified magnetic graphene oxide for pass-through cleanup of fipronil and its metabolites in human blood

Shi-Wei He^a, Yong-Gang Zhao^{a,b}, Yun Zhang^a, Mi-Cong Jin^b, Yan Zhu^{a, *}

(^a Department of Chemistry, Zhejiang University, Hangzhou, Zhejiang, 310027, China; ^b Key Laboratory of Health Risk Appraisal for Trace Toxic Chemicals of Zhejiang Province, Ningbo Municipal Center for Disease Control and Prevention, Ningbo, Zhejiang, 315010, China)

*Corresponding author. E-mail address: zhuyan@zju.edu.cn (Y. Zhu).

*Highlights

- HTC-Mag-GO covered porous nano-titania as coating has been designed and synthesized.
- A pass-through cleanup procedure using HTC-Mag-GO as sorbent has been developed.
- HTC-Mag-GO is much more effective for the removal of blood phospholipids.
- LOQs are significantly lower than other reported LC-MS/MS-based methodologies.
- The method is efficient and promising for the applicability to clinical studies.

Download English Version:

https://daneshyari.com/en/article/7608111

Download Persian Version:

https://daneshyari.com/article/7608111

Daneshyari.com