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A sensitive method determination of the gender difference of neuroactive metabolites in tryptophan and dopamine pathways in the mouse serum and brain by UHPLC-MS/MS

Jiayi Yao<sup>a, 1</sup>, Haihua Lu<sup>a, 1</sup>, Zhonghe Wang<sup>a</sup>, Tingwei Wang<sup>b</sup>, Fangfang Fang<sup>b</sup>, Jun Wang<sup>b</sup>, Jing Yu<sup>a, \*</sup>, Rong Gao<sup>a, \*</sup>

<sup>a</sup> Department of Hygienic Analysis and Detection, the Key Laboratory of Modern Toxicology, Ministry of Education, School of Public Health, Nanjing Medical University, No. 101 Longmian Avenue, Nanjing 211166, China

<sup>b</sup> Department of Toxicology, Key Laboratory of Modern Toxicology, Ministry of Education, School of Public Health, Nanjing Medical University, No. 101 Longmian Avenue, Nanjing 211166, China

<sup>1</sup> Jiayi Yao and Haihua Lu contributed equally to this work.

\* Corresponding authors at: Department of Hygienic Analysis and Detection, the Key Laboratory of Modern Toxicology, Ministry of Education, School of Public Health, Nanjing Medical University, No. 101 Longmian Avenue, Nanjing 211166, China. Tel.: 86-025-86868401; Fax.: 86-025-86868499  
E-mail addresses: gaorong@njmu.edu.cn (R. Gao), yujingfei@126.com (J. Yu).

## Abstract

Tryptophan (TRP) and dopamine (DA) pathways are of great importance for their related pathology and physiology. In the present study, a new reliable and sensitive analytical method was developed and validated for 12 neuroactive metabolites in TRP and DA pathways in mouse serum and brain by ultra-high-performance liquid chromatography coupled to tandem mass spectrometry (UHPLC-MS/MS). The method exhibited good sensitivity as the lower limit of detections ranged from 0.10 to 0.50 ng/ml and the lower limit of quantifications

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