

ABSTRACT

The present invention belongs to the technical field of metabolomics, and relates to a metabolomics relative quantitative analysis method based on
5 UPLC/HRMS. Specifically, the present method mainly comprises the steps of
formulating an isotope internal standard mixed solution, a standard curve correction
solution, and a metabolomics sample solution; acquiring raw mass spectrum data of
the standard curve correction solution and the metabolomics sample solution;
transposing and deconvolving the raw data; identifying and selecting the optimal
10 isotope internal standard; fitting a linear equation and calculating the relative
quantitative results of metabolites in the metabolomics sample solution; and
completing the structural identification of metabolites and differential metabolites
in the metabolomics sample solution. The method can meet both qualitative and
quantitative requirements using only a high-resolution mass spectrometry platform;
15 and the quantitative results are accurate, and the accuracy of the qualitative results
are higher, having low costs, simple operation, and wide applicability.