

Extraction of Metabolites

Metabolites were extracted using 80% methanol. In brief, the samples were added with 80% methanol. After vortexing for 1 min and centrifugation at 2000×g for 10 min, supernatant was transferred to a new 1.5 mL tube and completely dried using a HyperVAC-MAX VC2200 centrifugal vacuum concentrator (Hanil Scientific Inc., Korea). Dried metabolite contents were reconstituted in 100 μ L of 0.1% formic acid in water and then subjected to LC-MS/MS analysis.