Metabolism and Excretion Study of Daphnoretin in Rats after Oral Administration

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SUMMARY. The metabolism and excretion profile in rats were investigated after a single dose of daphnoretin. Metabolites of daphnoretin in rats were characterized by HPLC-MSn analysis. A HPLC-UV method was developed to determine the concentration of daphnoretin in rat urine, feces and bile. Daphnoretin was biotransformed via conjunctive and oxidative pathways to three detected metabolites. The structures of these metabolites were tentatively identified. The cumulative excretion percentage of daphnoretin in urine, feces and bile of rats was 0.13, 52.7, and 0.018 %, respectively. All the metabolites and excretion data are reported for the first time.

KEY WORDS: Daphnoretin, Excretion, Metabolites identification, Oral administration.

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