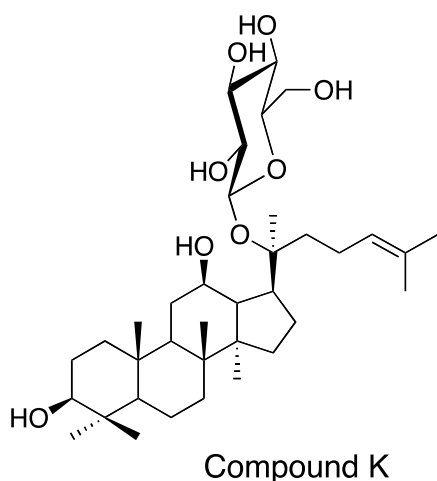


Compound K



【化合物】 Compound K

【測定機器】 LC-MS/MS

【対象】 動物（ヒト）；微生物（ヒト腸内細菌フローラ）

【代謝実験】 The study was aimed to characterize the absorption, distribution and metabolism of ginseng in human subjects using pharmacokinetic experiments based on the metabolism by microflora from feces. Fecal microflora from humans transformed ginsenoside-Rb1 (G-Rb1) and ginseng extracts into compound K (C-K). Subsequently, C_{\max} , T_{\max} and AUC for C-K in plasma were estimated by quantitative analysis using LC-MS/MS. C-K was absorbed into the blood 24 h after oral administration of ginseng, with average values for T_{\max} , C_{\max} , and AUC as follows: 10.76 ± 2.07 h, 27.89 ± 24.46 (ng/ml), and 221.98 ± 221.42 (μ g h/ml), respectively. There was a correlation between the C-K transforming activity of G-Rb1 and the C-K transforming activity of ginseng extract by intestinal microflora (Spearman's correlation coefficient = 0.402, $p < 0.05$). [Lee et al., *Journal of Ethnopharmacology*, **122**: 143–148 (2009)]

【代謝パラメータ】

Distribution of compound K in the plasma as C_{\max} , T_{\max} and AUC .

	Mean \pm S.D.
C_{\max} (ng/ml)	27.89 \pm 24.46
T_{\max} (h)	10.76 \pm 2.07
AUC (ng h/ml)	221.98 \pm 221.42

C_{\max} : maximum plasma concentration; T_{\max} : maximum drug concentration time; AUC : area under the blood concentration curve. C_{\max} and T_{\max} were estimated directly from the plasma concentration–time data. AUC was calculated by using the log-linear trapezoidal rule for the total period and extrapolated to infinity. [Lee et al., *Journal of Ethnopharmacology*, **122**: 143–148 (2009)]

【参考文献】

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