Ginsenoside Re

20(S)-Ginsenoside Re

【化合物】Ginsenoside Re

【測定機器】ultra performance liquid chromatography/mass spectrometric method

【対象】動物(mouse)

【代謝実験】

Following the intravenous and oral administration of pure Re (major ginsenoside in ginseng berry) or a ginseng berry extract in mouse with doses of 10 and 50 mg/kg monitored by ultra performance liquid chromatography mass spectrometry (UPLC/MS), ginsenoside Re was rapidly cleared from the body with a short half-life $(0.2\pm0.03~\text{h}$ for male and $0.5\pm0.08~\text{h}$ for female mice after i.v., and the oral absorption was generally poor (F% 0.19–0.28). Notably, GB extract showed a superior oral absorption of ginsenoside Re (F% 0.33–0.75) at equivalent ginsenoside Re dose to pure ginsenoside Re. [Joo et al., Journal of Pharmaceutical and Biomedical Analysis, 51, 278–283 (2010)]

【代謝パラメータ】

Pharmacokinetic parameters of ginsenoside Re and GB extract after oral (10,

50 mg/kg) administration to ICR mice.

	Oral (10 mg/kg)		Oral (50 mg/kg)	
Parameter	Ginsenoside Re	GB extract	Ginsenoside Re	GB extract
T_{\max} (h)	0.4±0.2	0.3±0.13	0.7±0.7	0.5±0.3
C_{\max} (ng/mL)	29.0±25.4	21.3±10.1	35.0±4.3	124.1±127.9*
$AUC_{(0-t)}$	17.7±4.5	21.3±19.9	61.5±37.0	238.3±64.2**
(ng/h/mL)				
MRT(h)	0.76±0.20	1.06±0.56	2.0±1.2	4.0±2.0
F%	0.28	0.33	0.19	0.75

Data are expressed as mean \pm SD (N= 7). Difference from corresponding ginsenoside Re group, *P < 0.1, **P < 0.05 [Joo et al., Journal of Pharmaceutical and Biomedical Analysis, **51**, 278–283 (2010)]

【参考文献】

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