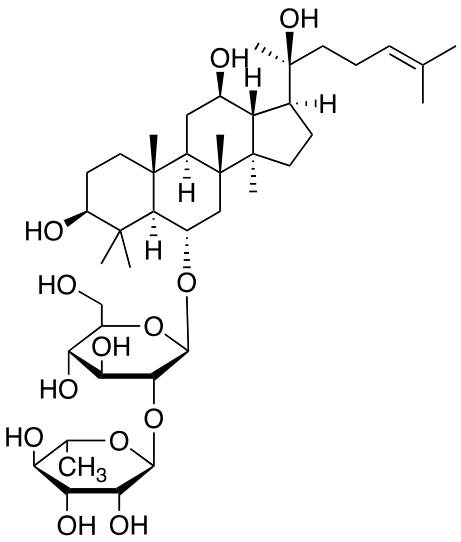
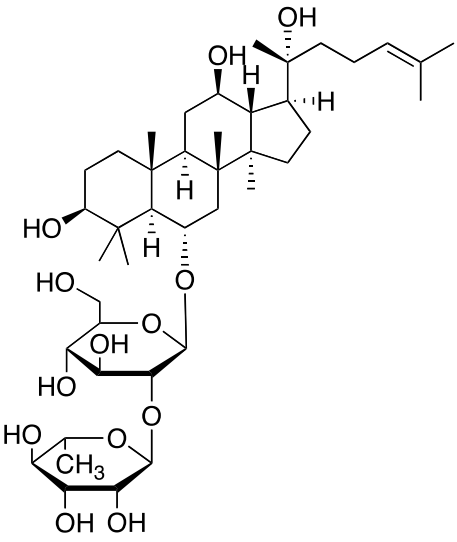
Ginsenoside Rg2



20(*S*)-Ginsenoside Rg2



20(*R*)-Ginsenoside Rg2

【化合物】Ginsenoside Rg2
【測定機器】LC-MS/MS
【対象】動物（ラット）
【代謝実験】To analyze racemic 20 (*R*, *S*)-ginsenoside-Rg2, an anti-shock agent, a simple and reproducible high-performance liquid chromatographic (HPLC) method has been developed. The enantiomeric separation and determination were successfully achieved using a DiamonsilTM ODS C18 reversed-phase column with an RP18 guard column and a mobile phase of MeOH-*aq*. 4% H_3PO_4 (65:35, v/v, pH 5.1) with UV detection at 203 nm. Both enantiomers, 20 (*R*)-ginsenoside-Rg2 and 20 (*S*)-ginsenoside-Rg2, were well separated at 14.5 min and 13.6 min, respectively. In pharmacokinetic studies in rat plasma after intravenous administration of 20 (*R*, *S*)-ginsenoside-Rg2, the enantiomers were rapidly absorbed and eliminated.
[Gui et al., *Journal of Chromatography B*, **850**: 1–6 (2007)]

Pharmacokinetic parameter of 20 (*R*)- and 20 (*S*)-ginsenoside-Rg2 [20 (*R*)-

ginsenoside-Rg2 for 2 mg/kg and 20 (*S*)-ginsenoside-Rg2 for 23 mg/kg] in rat plasma (n=3)

Parameter Unit	Value	
	20 (*R*)-Ginsenoside-Rg2	20 (*S*)-Ginsenoside-Rg2
A μ gml^{-1}	5.0005 ± 0.0648	55.3000 ± 3.7722
α min^{-1}	0.1740 ± 0.0220	0.1963 ± 0.0633
B μ gml^{-1}	1.6259 ± 0.1232	14.5104 ± 5.6855
β min^{-1}	0.0097 ± 0.0004	0.0181 ± 0.0057
$t_{1/2\alpha}$ min	4.0246 ± 0.0087	3.7242 ± 0.0459
$t1_{/2\beta}$ min	71.1999 ± 3.1586	38.4414 ± 1.1134
K21 min^{-1}	0.0504 ± 0.0065	0.0562 ± 0.0274
K10 min^{-1}	0.0336 ± 0.0003	0.0640 ± 0.0100
K12 min^{-1}	0.0997 ± 0.0157	0.0942 ± 0.0358
Vc kg^{-1}	3.8115 ± 0.0988	0.3620 ± 0.0459
Vd kg^{-1}	7.5398 ± 0.5373	0.6068 ± 0.3821
AUC μ g min ml^{-1}	197.7176 ± 5.1766	1092.5109 ± 83.9747
CLs min^{-1}	0.1264 ± 0.0003	0.0232 ± 0.0013

[Gui et al., *Journal of Chromatography B*, **850**: 1–6 (2007)]

【参考文献】

21)

Fang-Jin Gui, Xiu-Wei Yang, Long-Yun Li, Jian-Ming Tian, Simultaneous enantiomer determination of 20 (*R*)- and 20 (*S*)-ginsenoside-Rg2 in rat plasma after intravenous administration using HPLC method. *Journal of Chromatography B*, **850**: 1–6 (2007).