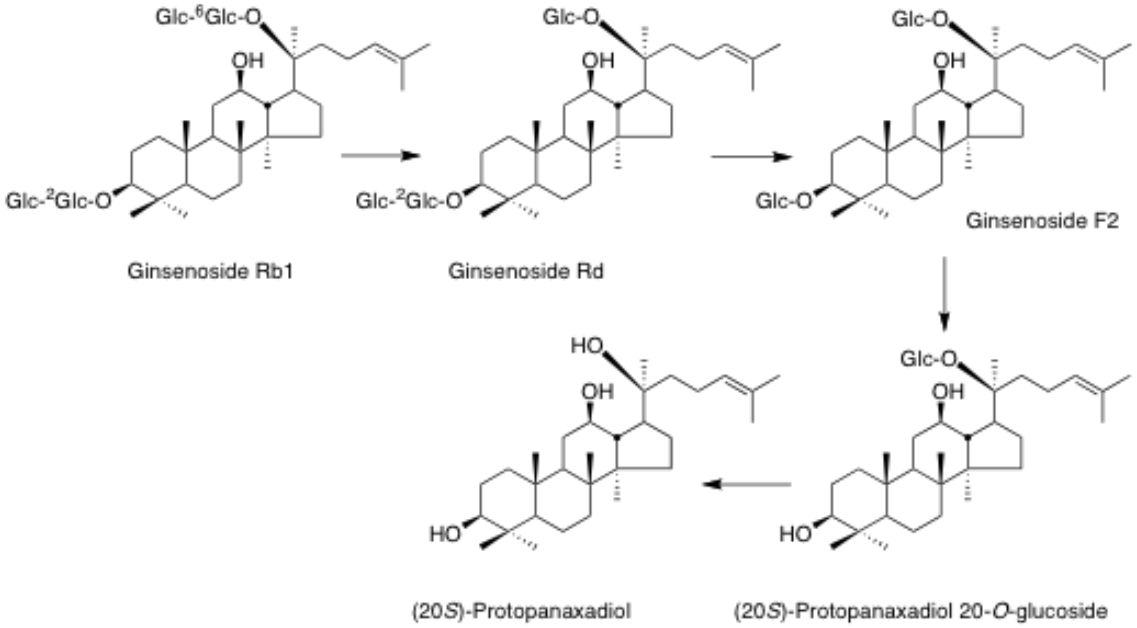
Ginsenoside Rb1



代謝実験

動物代謝　通常ラット、無菌ラット

単一化合物　ginsenoside Rb1

		Germ-free rat		Gnotobiote rat	
		7 h	15 h	7 h	15 h
Small intestine	Ginsenoside Rb1	13.5	2.9	N.D.	N.D.
	Compound K	N.D.	N.D.	5.6	6.7
Cecum	Ginsenoside Rb1	67.3	51.7	32.0	N.D.
	Compound K	N.D.	N.D.	9.3	19.2
Colon + rectum	Ginsenoside Rb1	4.5	7.4	3.5	N.D.
	Compound K	N.D.	N.D.	0.6	2.1
Feces	Ginsenoside Rb1	5.6	8.8	2.5	N.D.
	Compound K	N.D.	N.D.	0.7	18.9

Table 1. Recovery of ginsenoside Rb1, and the compound K content of the intestinal tracts and cumulative feces of germ-free and gnotobiote rats 7 and 15 h after oral administration of ginsenoside Rb1

Data are mean recoveries (%) of the dose administered (n = 3). N.D., not detected. [Akao *et al*., *J. Pharm. Pharmacol.,* **50**, 1155-1160 (1998)]

Animals, treatment and sampling

Male Wistar germ-free rats (WA/Jic, 5-6 weeks; CLEA Japan, Tokyo, Japan) were individually maintained in metabolic cages under germ-free conditions and fasted overnight before the experiments. Autoclaved water and sterilized standard laboratory chow (CE-2, X-ray-treated, CLEA, Japan) were freely available. Six germ-free rats were infected with *Eubacterium* sp. A-44 (2 mL medium cultured overnight) on the first and third days to produce the gnotobiote rats. One week later sterile ginsenoside Rb1 dissolved in pure water was administered orally to six germ-free rats and to the gnotobiote rats at a dose of 200 mg kg^{-1}. The cumulative faeces were collected 7 h (three rats) and 15 h (three rats) after administration. Blood samples from the abdominal vein and the gastrointestinal tract were taken under pentobarbital anaesthesia 7 h (three rats) and 15 h (three rats) after administration. Plasma samples were prepared by centrifugation of the heparinized blood and stored at -20°C until use. [Akao *et al*., *J. Pharm. Pharmacol.,* **50**, 1155-1160 (1998)]

参考文献

1) Akao T., Kida H., Kanaoka M., Hattori M. and Kobashi K.: Intestinal bacterial hydrolysis is required for the appearance of compound K in rat plasma after oral administration of ginsenoside Rb1 from *Panax ginseng. J. Pharm. Pharmacol.,* **50**, 1155-1160 (1998).