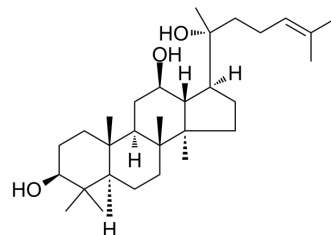


(20R)-Protopanaxadiol

Cat. No.:	HY-N2040
CAS No.:	7755-01-3
Molecular Formula:	C ₃₀ H ₅₂ O ₃
Molecular Weight:	460.73
Target:	Bacterial
Pathway:	Anti-infection
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 20 mg/mL (43.41 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		2.1705 mL	10.8523 mL	21.7047 mL
		5 mM		0.4341 mL	2.1705 mL	4.3409 mL
10 mM		0.2170 mL	1.0852 mL	2.1705 mL		
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2 mg/mL (4.34 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2 mg/mL (4.34 mM); Suspended solution; Need ultrasonic Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2 mg/mL (4.34 mM); Clear solution 					

BIOLOGICAL ACTIVITY

Description	(20R)-Protopanaxadiol is a triterpenoid saponin metabolite of 20(R)-ginsenoside Rg3 in black ginseng. (20R)-Protopanaxadiol exhibits anti-tumor activity and cytotoxicity, and potently inhibits the growth of <i>Helicobacter pylori</i> ^{[1][2][3]} .
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REFERENCES

- [1]. Liu L, et al. Enzymatic preparation of 20(S, R)-protopanaxadiol by transformation of 20(S, R)-Rg3 from black ginseng. *Phytochemistry*. 2010 Sep;71(13):1514-20.
- [2]. Bae EA, et al. Metabolism of 20(S)- and 20(R)-ginsenoside Rg3 by human intestinal bacteria and its relation to in vitro biological activities. *Biol Pharm Bull*. 2002

Jan;25(1):58-63.

[3]. Hasegawa H, et al. Inhibitory effect of some triterpenoid saponins on glucose transport in tumor cells and its application to in vitro cytotoxic and antiviral activities. *Planta Med.* 1994 Jun;60(3):240-3.

Caution: Product has not been fully validated for medical applications. For research use only.

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