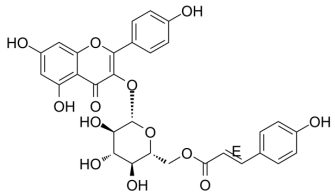
Tiliroside

Cat. No.:	HY-N1425
CAS No.:	20316-62-5
Molecular Formula:	$C_{30}H_{26}O_{13}$
Molecular Weight:	594.52
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (420.51 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.6820 mL	8.4101 mL	16.8203 mL
	5 mM	0.3364 mL	1.6820 mL	3.3641 mL
	10 mM	0.1682 mL	0.8410 mL	1.6820 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (3.50 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (3.50 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (3.50 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Tiliroside, a glycosidic flavonoid, possesses anti-diabetic activities. Tiliroside is a noncompetitive inhibitor of α-amylase with a K_i value of 84.2 μM. Tiliroside inhibits carbohydrate digestion and glucose absorption in the gastrointestinal tract[1].

In Vitro

Tiliroside inhibits pancreatic α-amylase (IC_{50}=0.28 mM) in vitro[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

In male ICR mice, the increase in postprandial plasma glucose levels was significantly suppressed in the Tiliroside-administered group[1].

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REFERENCES

[1]. Goto T, et al. Tiliroside, a glycosidic flavonoid, inhibits carbohydrate digestion and glucose absorption in the gastrointestinal tract. Mol Nutr Food Res. 2012 Mar;56(3):435-45.

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

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