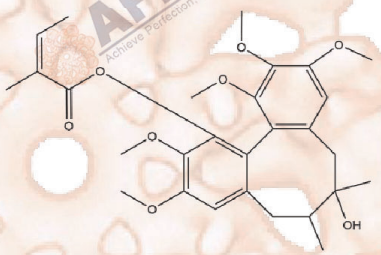
Product Data Sheet

Angeloylgomisin H



Cat. No.:	C8647
CAS No.:	66056-22-2
Formula:	C28H36O8
M.Wt:	500.59
Synonyms:	/
Target:	PPAR-γ
Pathway:	DNA Damage
Storage:	Store at -20° C away from moisture and light for 3 years

Solvent & Solubility

In Vitro

Soluble in DMSO

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	1.9976 mL	9.9882 mL	19.9764 mL
5 mM	0.3995 mL	1.9976 mL	3.9953 mL
10 mM	0.1998 mL	0.9988 mL	1.9976 mL

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

Biological Activity

Shortsummary	Angeloylgomisin H (CAS No. 66056-22-2) is a natural lignan compound derived from Schisandra rubriflora. It has been shown to activate peroxisome proliferator-activated receptor gamma (PPAR-γ), thereby improving insulin-stimulated glucose uptake. This suggests its potential value in antidiabetic research and metabolic regulation.
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	AGS, HeLa, and HT-29
Preparation method:	Cells were seeded at a thickness of 1 × 10^3 cells/well in a 96-well plate and refined with sans serum DMEM or RPMI-1640 for 16 h. At that point, the cells

		were treated with sequential groupings of Angeloyl gomisin H in different concentration (10, 25, 50 μg/mL) for 24 h.
	Reacting conditions:	10, 25, 50 μg/mL, 24 h
	Applications:	The MTT assay showed that angeloyl gomisin H concentration-dependently suppressed the proliferation and viability against three cancer cells. AGS (22.01 ± 1.87 μM), HeLa (32.68 ± 2.21 μM), and HT29 (156.04 ± 6.71 μM) cells.
In Vivo	**Animal experiment**	
	Animal models:	Male Sprague–Dawley rats
	Dosage form:	The daily FS-60 intake was 200 mg/kg. Angeloylgomisin H should be 200 mg × (0.6 mg/g) = 0.12 mg (based on the mean content of 0.6 mg/g FS-60).
	Applications:	Angeloylgomisin H, as a component of FS-60 (0.6 ± 0.1 mg/g FS-60) administered orally at 200 mg/kg bw daily for 8 weeks to 90% pancreatectomized type 2 diabetic rats, contributed to FS-60's effects of reducing fasted serum glucose, improving glucose tolerance, enhancing insulin sensitivity (via increased glucose infusion rate and suppressed hepatic glucose output), and potentiating first-phase insulin secretion.
	Preparation method:	Angeloylgomisin H was identified as one of the key lignan components in FS-60 — a lignan-rich fraction of Fructus Schisandrae prepared via 70% ethanol extraction and XAD column fractionation (eluted with 60% methanol). In animal experiments, FS-60 (containing 0.6 ± 0.1 mg/g Angeloylgomisin H, along with schizandrin and gomisin A) was administered to 90% pancreatectomized (Px) type 2 diabetic rats. The rats were orally given 200 mg/kg body weight (bw) of FS-60 daily for 8 weeks.
	Other notes:	The technical data provided above is for reference only.

Product Citations

See more customer validations on www.apexbt.com.

References

1. Choi, SK., Lee, YG., Wang, R.B. et al. Dibenzocyclooctadiene lignans from the fruits of Schisandra chinensis and their cytotoxicity on human cancer cell lines. Appl Biol Chem 63, 39 (2020). https://doi.org/10.1186/s13765-020-00524-y.

2. Kwon DY, Kim DS, Yang HJ, Park S. The lignan-rich fractions of Fructus Schisandrae improve insulin sensitivity via the PPAR-γ pathways in in vitro and in vivo studies. J Ethnopharmacol. 2011 May 17;135(2):455-62. doi: 10.1016/j.jep.2011.03.037. Epub 2011 Apr 2. PMID: 21440615.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com