Inhibitors

Swertiajaponin

Cat. No.: HY-N2204 CAS No.: 6980-25-2 Molecular Formula: $C_{22}H_{22}O_{11}$ Molecular Weight: 462.4

Target: Tyrosinase

Pathway: Metabolic Enzyme/Protease Storage: 4°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 250 mg/mL (540.66 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1626 mL	10.8131 mL	21.6263 mL
	5 mM	0.4325 mL	2.1626 mL	4.3253 mL
	10 mM	0.2163 mL	1.0813 mL	2.1626 mL

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

BIOLOGICAL ACTIVITY

Description Swertiajaponin is a tyrosinase inhibitor, forms multiple hydrogen bonds and hydrophobic interactions with the binding pocket of tyrosinase, with an IC₅₀ of 43.47 μM. Swertiajaponin also inhibits oxidative stress-mediated MAPK/MITF signaling, leading to decrease in tyrosinase protein level. Swertiajaponin suppresses melanin accumulation and exhibits strong antioxidative activity [1].

IC50: 43.47 μM (tyrosinase)^[1] IC₅₀ & Target

REFERENCES

[1]. Lee B, et al. Swertiajaponin inhibits skin pigmentation by dual mechanisms to suppress tyrosinase. Oncotarget. 2017 Sep 15;8(56):95530-95541.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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