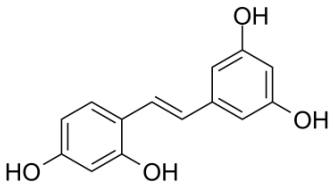
Oxyresveratrol

Cat. No.:	HY-N1430
CAS No.:	29700-22-9
Molecular Formula:	$C_{14}H_{12}O_4$
Molecular Weight:	244.24
Target:	Tyrosinase; Autophagy
Pathway:	Metabolic Enzyme/Protease; Autophagy
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 34 mg/mL (139.21 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.0943 mL	20.4717 mL	40.9433 mL
	5 mM	0.8189 mL	4.0943 mL	8.1887 mL
	10 mM	0.4094 mL	2.0472 mL	4.0943 mL

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

BIOLOGICAL ACTIVITY

Description

Oxyresveratrol is neuroprotective and inhibits the apoptotic cell death in transient cerebral ischemia. It effectively scavenges H2O2, NO (IC50 = 45.3 μM), and the artificial free radical 2,2-diphenyl-l-picrylhydrazyl (IC50 = 28.9 μM) In vitro: 1)oxyresveratrol exhibited more than 50% inhibition at 100 μM on L-tyrosine oxidation by murine tyrosinase activity.2) oxyresveratrol showed an IC50 value of 52.7 μM on the enzyme activity. 3) oxyresveratrol works through reversible inhibition of tyrosinase activity rather than suppression of the expression and synthesis of the enzyme.[2] In vivo: 1) Oxyresveratrol (10 or 20 mg/kg) significantly reduced the brain infarct volume by approximately 54% and 63%, respectively, when compared to vehicle-treated MCAO rats.2) oxyresveratrol treatment diminished cytochrome c release and decreasedcaspase-3 activation in MCAO rats. [3]

REFERENCES

[1]. Lorenz. et al. Oxyresveratrol and resveratrol are potent antioxidants and free radical scavengers: Effect on nitrosative and oxidative stress derived from

microglial cells. Nitric Oxide 9(2) 64-76 (2003).

[2]. Kim, Y.M., Yun, J., Lee, C., et al. Oxyresveratrol and hydroxystilbene compounds. Inhbitory effect on tyrosinase and mechanism of action. J Biol Chem277(18) 16340-16344 (2002).

[3]. Shaida A Andrabi et al. Oxyresveratrol (trans-2,3′,4,5′-tetrahydroxystilbene) is neuroprotective and inhibits the apoptotic cell death in transient cerebral ischemia. Brain Res, 2004 Aug 13, 1017(1-2):98-107.

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