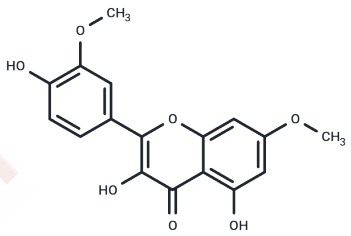
Data Sheet (Cat.No.TN2150)

TargetMol

Rhamnazin

Chemical Properties



CAS No. : 552-54-5

Formula: C17H14O7

Molecular Weight: 330.29

Storage: Keep away from direct sunlight,Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Rhamnazin (3',7-Dimethylquercetin) is an orally active VEGFR2 signaling inhibitor with anti-angiogenesis, anti-tumor, antioxidant, and anti-inflammatory activities. It inhibits VEGFR2 kinase and is used for leukemia research.
Targets(IC50)	VEGFR
In vitro	Rhamnazin (5, 10, and 15 μM, 24h) reduces the proliferation and invasion of hepatocellular carcinoma (HCC) cells. [2] Rhamnazin directly inhibited VEGFR2 kinase activity in a dose-dependent manner with an IC50 of 4.68 μM. [3]
In vivo	Treatment with Rhamnazin (10-30 mg/kg) significantly improved experimental brain injury in rats, with results showing significant reduction of edema and improved grip strength. [1] Rhamnazin (200 mg/kg/ day orally) significantly inhibited the growth of human tumor xenografts and reduced the microvascular density (MVD) of tumor sections. [3]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0276 mL	15.1382 mL	30.2764 mL
5 mM	0.6055 mL	3.0276 mL	6.0553 mL
10 mM	0.3028 mL	1.5138 mL	3.0276 mL
50 mM	0.0606 mL	0.3028 mL	0.6055 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Yang B, et al. Rhamnazin Ameliorates Traumatic Brain Injury in Mice via Reduction in Apoptosis, Oxidative Stress, and Inflammation. Neuroimmunomodulation. 2022;29(1):28-35.
Mei F, et al. Rhamnazin Inhibits Hepatocellular Carcinoma Cell Aggressiveness in Vitro via Glutathione Peroxidase 4-Dependent Ferroptosis. Tohoku J Exp Med. 2022 Sep 13;258(2):111-120.
Yu Y, et al. Rhamnazin, a novel inhibitor of VEGFR2 signaling with potent antiangiogenic activity and antitumor efficacy. Biochem Biophys Res Commun. 2015 Mar 20;458(4):913-9.

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