3',4'-Dihydroxyflavonol

Cat. No.: HY-111804

CAS No.: 6068-78-6

Molecular Formula: $C_{15}H_{10}O_5$

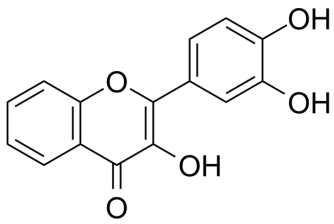
Molecular Weight: 270.24

Target: NO Synthase

Pathway: Immunology/Inflammation

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 : 125 mg/mL (462.55 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.7004 mL	18.5021 mL	37.0041 mL
	5 mM	0.7401 mL	3.7004 mL	7.4008 mL
	10 mM	0.3700 mL	1.8502 mL	3.7004 mL

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

BIOLOGICAL ACTIVITY

Description

3',4'-Dihydroxyflavonol (DiOHF) is an effective antioxidant, which reduces superoxide and improves nitric oxide (NO) function in diabetic rat mesenteric arteries[1].

In Vitro

3',4'-Dihydroxyflavonol (DiOHF) acutely preserves nitric oxide (NO) activity in the presence of elevated reactive oxygen species (ROS). DiOHF improves NO activity in diabetes by reducing Nox2-dependent superoxide production and preventing eNOS uncoupling to improve endothelial function[1].

3',4'-Dihydroxyflavonol reduces vascular contraction through Ca^{2+} desensitization in permeabilized third-order branches of rat mesenteric arteries[2].

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

REFERENCES

[1]. Leo CH, et al. 3',4'-Dihydroxyflavonol reduces superoxide and improves nitric oxide function in diabetic rat mesenteric arteries. PLoS One. 2011;6(6):e20813.

[2]. Kim HY, et al. 3',4'-Dihydroxyflavonol reduces vascular contraction through Ca^{2+} desensitization in permeabilized rat mesenteric artery. Naunyn Schmiedebergs Arch Pharmacol. 2012 Feb;385(2):191-202.

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