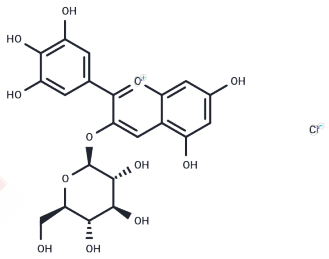
Data Sheet (Cat.No.TN1564)

TargetMol

Delphinidin 3-glucoside chloride

Chemical Properties



CAS No. : 6906-38-3

Formula: C21H21ClO12

Molecular Weight: 500.84

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	Delphinidin 3-glucoside chloride (Delphinidin-3-O-glucoside chloride) is a dietary phenolic substance found in Hibiscus sabdariffa extracts. Delphinidin 3-glucoside chloride has antioxidant activity, induces pro-apoptotic effects in B-cell chronic lymphocytic leukemia (B CLL), inhibits EGFR, and inhibits platelet aggregation. Delphinidin 3-glucoside chloride has antitumor activity, and is known to inhibit platelet aggregation by modulating pAKT/IRF1/IRF1/IRF1/IRF1/IRF1/IRF1/IRF1/IRF1/IRF1. Delphinidin 3-glucoside chloride has anti-tumor activity and acts by regulating the pAKT/IRF1/HOTAIR pathway.
Targets(IC50)	Apoptosis,EGFR,Akt
In vitro	Delphinidin 3-glucoside chloride (30-100 μM; 24 h) induces cell apoptosis[1].
In vivo	In the MDA-MB-231-Luc-GFP xenografted athymic BALB/c mice model, Delphinidin 3-glucoside chloride (40 mg/kg/day; i.g., for 25 days) inhibited tumor growth[4].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9966 mL	9.9832 mL	19.9665 mL
5 mM	0.3993 mL	1.9966 mL	3.9933 mL
10 mM	0.1997 mL	0.9983 mL	1.9966 mL
50 mM	0.0399 mL	0.1997 mL	0.3993 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

Mahmoud Alhosin, et al. Bilberry extract (Antho 50) selectively induces redox-sensitive caspase 3-related apoptosis in chronic lymphocytic leukemia cells by targeting the Bcl-2/Bad pathway. Sci Rep. 2015 Mar 11;5:8996.
Naoki Nanashima, et al. Phytoestrogenic Activity of Blackcurrant Anthocyanins Is Partially Mediated through Estrogen Receptor Beta. Molecules. 2017 Dec 29;23(1):74.
Candice Mazewski, et al. Comparison of the effect of chemical composition of anthocyanin-rich plant extracts on colon cancer cell proliferation and their potential mechanism of action using in vitro, in silico, and biochemical assays. Food Chem. 2018 Mar 1;242:378-388.
Yang X, et al., Delphinidin-3-glucoside suppresses breast carcinogenesis by inactivating the Akt/HOTAIR signaling pathway. BMC Cancer. 2016 Jul 7;16:423.