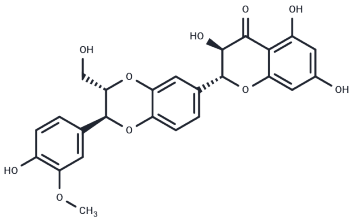
Data Sheet (Cat.No.TN1805)

TargetMol
YOUR TARGET MOLECULES

Isosilybin B

Chemical Properties



CAS No. : 142796-22-3

Formula: C25H22O10

Molecular Weight: 482.44

Appearance: no data available

Storage: store at low temperature,keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Isosilybin B is a flavonolignan extracted from silymarin that exhibits anti-prostate cancer (PCA) activity, inhibits cancer cell proliferation, and contributes to G1-phase blockade and apoptosis.Isosilybin B induces degradation of the androgen receptor.
Targets(IC50)	Apoptosis,Androgen Receptor
In vitro	Isosilybin B also inhibited the microvessel sprouting from mouse dorsal aortas ex vivo, and the VEGF-induced cell proliferation, capillary-like tube formation, and invasiveness of human umbilical vein endothelial cells (HUVEC) in vitro. Further studies in HUVEC showed that these diastereoisomers target cell cycle, apoptosis, and VEGF-induced signaling cascade. Three-dimensional growth assay as well as co-culture invasion and in vitro angiogenesis studies (with HUVEC and DU145 cells) suggested the differential effectiveness of the diastereoisomers toward PCA and endothelial cells.[3]
In vivo	Isosilybin B (50 and 100 mg/kg body weight; oral) effectively inhibits the growth of advanced human PCA DU145 xenografts. Immunohistochemical analyses revealed that Isosilybin B inhibit tumor angiogenesis biomarkers (CD31 and nestin) and signaling molecules regulating angiogenesis (VEGF, VEGFR1, VEGFR2, phospho-Akt, and HIF-1α±) without adversely affecting the vessel-count in normal tissues (liver, lung, and kidney) of tumor-bearing mice.[3]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0728 mL	10.364 mL	20.728 mL
5 mM	0.4146 mL	2.0728 mL	4.1456 mL
10 mM	0.2073 mL	1.0364 mL	2.0728 mL
50 mM	0.0415 mL	0.2073 mL	0.4146 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.

Reference

Deep G, et al. Isosilybin B and isosilybin A inhibit growth, induce G1 arrest and cause apoptosis in human prostate cancer LNCaP and 22Rv1 cells. Carcinogenesis. 2007 Jul;28(7):1533-42.