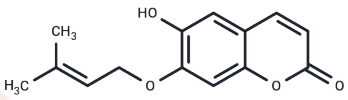
Data Sheet (Cat.No.TN7234)

TargetMol

Prenyletin

Chemical Properties



CAS No. :	15870-91-4
Formula:	C14H14O4
Molecular Weight:	246.26
Storage:	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	Prenyletin is a natural product found in the multilobed bimodal, multihorned pterosaurs.
Targets(IC50)	Others
In vitro	Pterocaulon alopecuroides, Pterocaulon balansae and Pterocaulon polystachyum (Asteraceae) from South Brazil traditionally used to treat animal mycoses, afforded the coumarins 5-methoxy-6,7-methylenedioxycoumarin, 7-(2',3'-epoxy-3'-methylbutyloxy) -6-methoxycoumarin, 6,7-methylenedioxycoumarin (ayapin), along with a mixture of 6-hydroxy-7-(3'-methylbutyl-2'-en-oxy)-coumarin (prenyletin) and 6-methoxy-7-(3'-methylbutyl-2'-en-oxy)-coumarin (prenyletin-methyl-ether). Among the different components of the active extracts, only the mixture of prenyletin and prenyletin-methyl-ether isolated from Pterocaulon polystachyum showed activity against Cryptococcus neoformans, Microsporum gypseum, Trichophyton rubrum and Trichophyton mentagrophytes. Nevertheless their MIC values were higher than the MIC of the original extracts, suggesting that the mixture but not only one compound would be the responsible for the activity detected in these Pterocaulon species.[1]

Solubility Information

Solubility	DMSO: 50 mg/mL (203.04 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0607 mL	20.3037 mL	40.6075 mL
5 mM	0.8121 mL	4.0607 mL	8.1215 mL
10 mM	0.4061 mL	2.0304 mL	4.0607 mL
50 mM	0.0812 mL	0.4061 mL	0.8121 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

Stein AC, et al. Antifungal activity of some coumarins obtained from species of Pterocaulon (Asteraceae). J Ethnopharmacol. 2006;107(1):95-98.
Whang WK, et al. Natural compounds,fraxin and chemicals structurally related to fraxin protect cells from oxidative stress. Exp Mol Med. 2005;37(5):436-446.
Vera N, et al. New coumarins from Pterocaulon polystachyum. Planta Med. 2001;67(7):674-677.