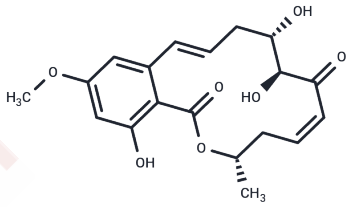
Data Sheet (Cat.No.T14055)

TargetMol

5Z-7-Oxozeaenol

Chemical Properties



CAS No. : 253863-19-3

Formula: C19H22O7

Molecular Weight: 362.37

Storage: Store at low temperature
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	5Z-7-Oxozeaenol (FR148083) is a potent, irreversible and selective inhibitor of transforming growth factor (TGF)-β-activated kinase 1 with IC50 of 8.1 nM for TAK1 and low activity against MEK1 with IC50 of 411 nM, it is also an inhibitor of VEGF-R2 with IC50 of 52 nM.
Targets(IC50)	FLT,MEK,MAPK,Antibiotic,PDGFR,Src,VEGFR
In vitro	5Z-7-Oxozeaenol is a natural anti-protozoan compound from the fungal origin with inhibitory activity against VEGF-R3, FLT3, PDGFR-β, B-RAF VE, and SRC with IC50s of 110, 170, 340, 6300, and 6600 nM, respectively[1]. 5Z-7-Oxozaeenol inhibited PMA-induced AP-1 activity to almost basal levels in KT cells but had no effect on IL-1-induced NF-kB activity in KK cells[2]. 5Z-7-Oxozaeenol inhibits the JNK/p38 pathway, but it is not a direct inhibitor and is signal-specific. 5Z-7-Oxozaeenol prevents inflammation by inhibiting the catalytic activity of the TAK1 MAPK kinase[3].

Solubility Information

Solubility	DMSO: 40 mg/mL (110.38 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2 mg/mL (5.52 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7596 mL	13.7981 mL	27.5961 mL
5 mM	0.5519 mL	2.7596 mL	5.5192 mL
10 mM	0.276 mL	1.3798 mL	2.7596 mL
50 mM	0.0552 mL	0.276 mL	0.5519 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

Dakas PY, et al. Modular synthesis of radicicol A and related resorcylic acid lactones, potent kinase inhibitors. Angew Chem Int Ed Engl. 2007;46(36):6899-902.

Takehana K, et al. A radicicol-related macrocyclic nonaketide compound, antibiotic LL-Z1640-2, inhibits the JNK/p38 pathways in signal-specific manner. Biochem Biophys Res Commun. 1999 Apr 2;257(1):19-23.