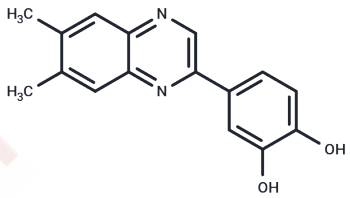
Data Sheet (Cat.No.T13238)

TargetMol

Tyrphostin AG1433

Chemical Properties



CAS No. : 168835-90-3

Formula: C16H14N2O2

Molecular Weight: 266.29

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	Tyrphostin AG1433 (AG1433) is an inhibitor of tyrosine kinases and also a dual inhibitor of PDGFRβ(IC50s = 5.0 μM) and VEGFR-2 (Flk-1/KDR)(IC50s = 9.3 μM).
Targets(IC50)	PDGFR,VEGFR
In vitro	In glioblastoma cells, Tyrphostin AG1433 (0.1-100 μM; 72 hours; GB8B cells) treatment induces moderate cytotoxicity [1].
In vivo	Tyrphostin AG1433 is prepared in methylcellulose pellets and applies to the CAMs of 4-6-day-old chicken embryos, and prevents the formation of new yessels under the pellets [2].

Solubility Information

Solubility	DMSO: 3.06 mg/mL (11.49 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: 1 mg/mL (3.76 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	3.7553 mL	18.7765 mL	37.553 mL
5 mM	0.7511 mL	3.7553 mL	7.5106 mL
10 mM	0.3755 mL	1.8777 mL	3.7553 mL
50 mM	0.0751 mL	0.3755 mL	0.7511 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

Serban F, et al. Silencing of epidermal growth factor, latrophilin and seven transmembrane domain-containing protein 1 (ELTD1) via siRNA-induced cell death in glioblastoma. J Immunoassay Immunochem. 2017;38(1):21-33.
Strawn LM, et al. Flk-1 as a target for tumor growth inhibition. Cancer Res. 1996 Aug 1;56(15):3540-5.
Kim TS, et al. The ZFHX3 (ATBF1) transcription factor induces PDGFRB, which activates ATM in the cytoplasm to protect cerebellar neurons from oxidative stress. Dis Model Mech. 2010 Nov-Dec;3(11-12):752-62.
Kroll J, et al. The vascular endothelial growth factor receptor KDR activates multiple signal transduction pathways in porcine aortic endothelial cells. J Biol Chem. 1997 Dec 19;272(51):32521-7.