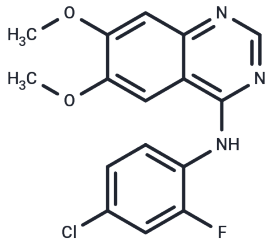
Data Sheet (Cat.No.T1754)

TargetMol

ZM 306416

Chemical Properties



CAS No. : 690206-97-4

Formula: C16H13ClFN3O2

Molecular Weight: 333.74

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	ZM 306416 (CB 676475), a VEGFR1 inhibitor (IC50: 0.33 μM), can also inhibit EGFR (IC50<10 nM).
Targets(IC50)	Bcr-Abl,Src,VEGFR
In vivo	When acting on human thyroid follicular cells, ZM306416 (1 μM) decreased nuclear distribution and increased follicle formation; a significant increase in cell death was observed at 3 μM.ZM306416 weakly inhibited VEGF secretion and increased PlGF production.ZM306416 (<10 μM) had a significant inhibitory effect on steady-state phosphorylation of p42/44 MAPK but had no effect on the non phosphorylated forms, but had no effect on the expression of non-phosphorylated forms. In human thyroid follicular cells, ZM306416 (300 nM) completely inhibited PAA secretion, stimulated [125I] uptake, and silenced pVEGFR2 (Y1214) expression. ZM-306416 exhibited selective antiproliferative effects (IC50: 0.09 μM and 0.072 μM) when acting on the epidermal growth factor receptor-naïve non-small cell (type) lung cancer cell lines H3255 and HCC4011. When acting on GeneBLAzer T-Rex RORγ-UAS-bla HEK293T cell line, ZM-306416 had a significant inhibitory effect on ERRα assay (IC50: 7.3 μM).ZM-306416 inhibited granule formation (IC50: 0.67 μM).

Solubility Information

Solubility	DMSO: 62 mg/mL (185.77 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), (< 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 (5.99 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	2.9963 mL	14.9817 mL	29.9634 mL
5 mM	0.5993 mL	2.9963 mL	5.9927 mL
10 mM	0.2996 mL	1.4982 mL	2.9963 mL
50 mM	0.0599 mL	0.2996 mL	0.5993 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

Antczak C, et al. J Biomol Screen, 2012, 17(7), 885-899.
Wilkinson J, et al. Assay Drug Dev Technol. 2011 Apr;9(2):125-35.
Susarla R, et al. Mol Cell Endocrinol, 2012, 351(2), 199-207.
Susarla R, et al. J Cell Physiol, 2012, 227(5), 11992-22002.