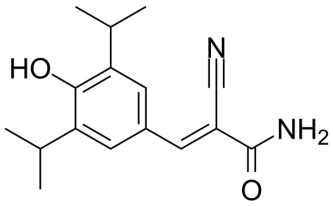
ST271

Cat. No.:	HY-103097
CAS No.:	106392-48-7
Molecular Formula:	$C_{16}H_{20}N_2O_2$
Molecular Weight:	272.34
Target:	Phospholipase
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (183.59 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.6719 mL	18.3594 mL	36.7188 mL
	5 mM	0.7344 mL	3.6719 mL	7.3438 mL
	10 mM	0.3672 mL	1.8359 mL	3.6719 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (9.18 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (9.18 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

ST271 is a potent inhibitor of protein tyrosine kinase (PTK), inhibits phospholipase D activation stimulated by fMet-Leu-Phe and PAF, with IC_{50}s of 6.7 and 9 μM, respectively.

IC_{50} & Target

IC50: 6.7 μM (phospholipase D, stimulated by fMet-Leu-Phe), 9 μM (phospholipase D, stimulated by PAF)[3]

In Vitro

ST271 partially inhibits peptide phosphorylation in the membrane preparation and in permeabilized platelets[1]. ST271 (100 μM) causes complete inhibition of formation of inositol phosphates induced by FcγRII cross-linking, but also induces a small (< 30%) but significant inhibition of the response to thrombin and U46619[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Martinson EA, et al. Inhibition of phospholipase D of human platelets by protein tyrosine kinase inhibitors. Cell Mol Biol (Noisy-le-grand). 1994 Jul;40(5):627-34.

[2]. Blake RA, et al. Fc gamma receptor II stimulated formation of inositol phosphates in human platelets is blocked by tyrosine kinase inhibitors and associated with tyrosine phosphorylation of the receptor.

[3]. Uings IJ, et al. Tyrosine phosphorylation is involved in receptor coupling to phospholipase D but not phospholipase C in the human neutrophil. Biochem J. 1992 Feb 1;281 (Pt 3):597-600.

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