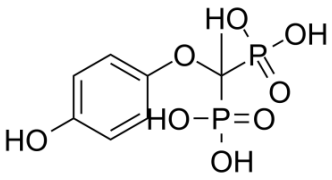
L-690330

Cat. No.:	HY-101075
CAS No.:	142523-38-4
Molecular Formula:	$C_8H_{12}O_8P_2$
Molecular Weight:	298.12
Target:	Phosphatase
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

H_2O : 33.33 mg/mL (**111.80 mM;** Need ultrasonic)
DMSO : 25 mg/mL (**83.86 mM;** Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.3544 mL	16.7718 mL	33.5435 mL
5 mM	0.6709 mL	3.3544 mL	6.7087 mL
10 mM	0.3354 mL	1.6772 mL	3.3544 mL

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

In Vivo

1. Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**
   Solubility: ≥ 2.5 mg/mL (8.39 mM); Clear solution
2. Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
   Solubility: ≥ 2.5 mg/mL (8.39 mM); Clear solution
3. Add each solvent one by one: **10% DMSO >> 90% corn oil**
   Solubility: ≥ 2.5 mg/mL (8.39 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

L-690330 is a competitive inhibitor of **inositol monophosphatase (IMPase)** with K_is of 0.27 and 0.19 μM for recombinant human and bovine IMPase, 0.30 and 0.42 μM for human and bovine frontal cortex IMPase, respectively. L-690330 exhibits 10-fold more sensitive than mouse and rat IMPase[1].

IC_{50} & Target

Ki: 0.27 μM (Recombinant human IMPase), 0.19 μM (Recombinant bovine IMPase), 0.30 μM (Human frontal cortex

	IMPase), 0.42 μM (Bovine frontal cortex IMPase)[1]

REFERENCES

[1]. Atack JR, et al. In vitro and in vivo inhibition of inositol monophosphatase by the bisphosphonate L-690,330. J Neurochem. 1993 Feb;60(2):652-8.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA