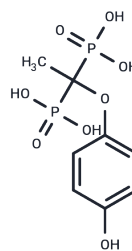


L-690330

Chemical Properties

CAS No. : 142523-38-4
 Formula: C₈H₁₂O₈P₂
 Molecular Weight: 298.12
 Appearance: no data available
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	L-690330 is a competitive inositol monophosphatase inhibitor (K _i : 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). L-690330 shows 10-fold more sensitive than a mouse and rat IMPase.
Targets(IC ₅₀)	Others
In vitro	In HEK293 cells, L-690330 (50 μM; 1 hour) causes P-AMPK and autophagy and increases LC3-I/II and p-AMPK expression[2].
In vivo	Except for a reduction in time spent in light in the dark/light test, L-690330 (intracerebroventricular?injection; 0.1 μmol) shows no effects on their motor activity and coordination in the beam walking [3].

Solubility Information

Solubility	H ₂ O: 33.33 mg/mL (111.80 mM),Sonication is recommended. DMSO: 25 mg/mL (83.86 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0671 mL	0.3354 mL	0.6709 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.

Reference

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.

Cárdenas C, et al.

Essential regulation of cell bioenergetics by constitutive InsP3 receptor Ca²⁺ transfer to mitochondria. Cell. 2010 Jul 23;142(2):270-83.

Shtein L, et al. The inositol monophosphatase inhibitor L-690,330 affects pilocarpine-behavior and the forced swim test. Psychopharmacology (Berl). 2013 Jun;227(3):503-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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