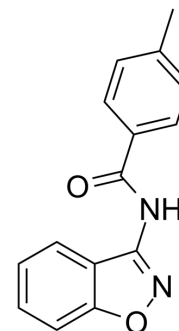


BAMB-4

Cat. No.:	HY-16694		
CAS No.:	891025-25-5		
Molecular Formula:	C ₁₅ H ₁₂ N ₂ O ₂		
Molecular Weight:	252.27		
Target:	Phosphatase		
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 : ≥ 40 mg/mL (158.56 mM)
 * "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.9640 mL	19.8200 mL	39.6401 mL
	5 mM	0.7928 mL	3.9640 mL	7.9280 mL
	10 mM	0.3964 mL	1.9820 mL	3.9640 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (9.91 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BAMB-4 (ITPKA-IN-C14) is a specific and membrane-permeable ITPKA inhibitor. BAMB-4 has high stability and membrane permeability and against the inositol-1,4,5-trisphosphate (InsP3) kinase activity of inositol-1,4,5-trisphosphate-3-kinase A (ITPKA) with an IC₅₀ value of 20 μM. BAMB-4 can be used for the research of metastasis of lung cancer^[1].

IC₅₀ & Target

IC₅₀: 37 μM (ITPKA); 20 μM (InsP3 kinase)^[1]

In Vitro

BAMB-4 (0.3-40 μM) has ITPKA inhibition effect with an IC₅₀ value of 37 μM^[1].
 BAMB-4 (40 μM) inhibits InsP3 kinase activity with an IC₅₀ value of 20 μM^[1].
 BAMB-4 (100 μM, overnight) has high specificity and the high cellular uptake^[1].
 BAMB-4 (0, 10, 20 and 40 μM) shows increased K_m and decreased V_{max}^[1].
 BAMB-4 (0-30 μM) is a mixed type inhibitor with respect to ATP and InsP3 and does not only affect binding of ATP but also

binding of InsP3 which affects turnover of two substrate exhibit a higher inhibition specificity^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Dominik Schröder, et al. Identification of a new membrane-permeable inhibitor against inositol-1,4,5-trisphosphate-3-kinase A. Biochem Biophys Res Commun

Caution: Product has not been fully validated for medical applications. For research use only.

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