

# **Product** Data Sheet

## AK-IN-1

Cat. No.: HY-148327 CAS No.: 378775-98-5 Molecular Formula:  $C_{22}H_{21}N_3O_4$  Molecular Weight: 391.42

Target: Adenosine Kinase

Pathway: Metabolic Enzyme/Protease; Neuronal Signaling

Storage: 4°C, protect from light

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (255.48 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.5548 mL	12.7740 mL	25.5480 mL
	5 mM	0.5110 mL	2.5548 mL	5.1096 mL
	10 mM	0.2555 mL	1.2774 mL	2.5548 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 (6.39 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

AK-IN-1 (compound 4072-2732) is an adenosine kinase (AK) inhibitor that is competitive for adenosine (Ado) but not for ATP. AK-IN-1 inhibits 86%, 87% and 89% of AK activity at concentrations of 2, 4 and 10  $\mu$ M, respectively. AK-IN-1 has good potential for research in many disease areas, including ischaemia, inflammation and seizures<sup>[1]</sup>.

#### **REFERENCES**

[1]. Park J, et al. Identification and biochemical studies on novel non-nucleoside inhibitors of the enzyme adenosine kinase. Protein J. 2007 Apr;26(3):203-12.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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

Page 2 of 2 www.MedChemExpress.com