**Proteins** 



## MARK-IN-1

Cat. No.: HY-101933 CAS No.: 1109283-93-3 Molecular Formula:  $C_{22}H_{23}F_{2}N_{7}OS$ 

Molecular Weight: 471.53 AMPK Target:

Pathway: Epigenetics; PI3K/Akt/mTOR Storage: 4°C, protect from light

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

## **SOLVENT & SOLUBILITY**

DMSO: 100 mg/mL (212.08 mM; Need ultrasonic) In Vitro

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1208 mL	10.6038 mL	21.2076 mL
	5 mM	0.4242 mL	2.1208 mL	4.2415 mL
	10 mM	0.2121 mL	1.0604 mL	2.1208 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 (5.30 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description	MARK-IN-1 is a potent microtubule affinity regulating kinase (MARK) inhibitor with an IC $_{50}$ of <0.25 nM.	
IC <sub>50</sub> & Target	IC50: <0.25 nM (MARK) <sup>[1]</sup>	
In Vitro	MARK-IN-1 (Compound 25) is a potent MARK inhibitor. Inhibition of MARK represents a potentially attractive means of arresting neurofibrillary tangle pathology in Alzheimer's disease <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

## **REFERENCES**

[1]. Sloman DL, et al. Optimization of microtubule affinity regulating kinase (MARK) inhibitors with improved physical properties. Bioorg Med Chem Lett. 2016 Sep 1;26(17):4362-6.

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

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