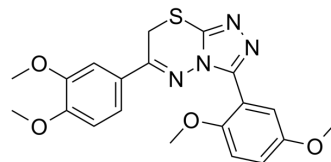


## ML-030

Cat. No.:	HY-103050		
CAS No.:	1013750-77-0		
Molecular Formula:	C <sub>20</sub> H <sub>20</sub> N <sub>4</sub> O <sub>4</sub> S		
Molecular Weight:	412.46		
Target:	Phosphodiesterase (PDE)		
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 : 50 mg/mL (121.22 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		2.4245 mL	12.1224 mL	24.2448 mL
		5 mM		0.4849 mL	2.4245 mL	4.8490 mL
10 mM			0.2424 mL	1.2122 mL	2.4245 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 (6.06 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.06 mM); Clear solution					

### BIOLOGICAL ACTIVITY

Description	ML-030 is a potent PDE4 inhibitor, with IC <sub>50</sub> of 6.7 nM, 12.9 nM, 48.2 nM, 37.2 nM, 452 nM and 49.2 nM for PDE4A, PDE4A1, PDE4B1, PDE4B2, PDE4C1, and PDE4D2, respectively.
IC <sub>50</sub> & Target	IC <sub>50</sub> : 6.7 nM (PDE4A), 12.9 nM (PDE4A1), 48.2 nM (PDE4B1), 37.2 (PDE4B2) nM, 452 (PDE4C1) nM, 49.2 (PDE4D2) nM <sup>[1]</sup>
In Vitro	ML-030 is potent in cell-based assay with an EC <sub>50</sub> value of 18.7 nM <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

## CUSTOMER VALIDATION

- Nat Commun. 2021 Jul 22;12(1):4457.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

---

## REFERENCES

[1]. Skoumbourdis AP, et al. Exploration and optimization of substituted triazolothiadiazines and triazolopyridazines as PDE4 inhibitors. Bioorg Med Chem Lett. 2009 Jul 1;19(13):3686-92.

---

**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](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA