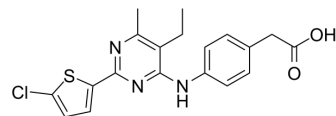


## PDE4B-IN-2

Cat. No.:	HY-115687		
CAS No.:	915082-52-9		
Molecular Formula:	C <sub>19</sub> H <sub>18</sub> ClN <sub>3</sub> O <sub>2</sub> S		
Molecular Weight:	387.88		
Target:	Phosphodiesterase (PDE)		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 25 mg/mL (64.45 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.5781 mL	12.8906 mL	25.7812 mL
5 mM	0.5156 mL	2.5781 mL	5.1562 mL
10 mM	0.2578 mL	1.2891 mL	2.5781 mL

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

### BIOLOGICAL ACTIVITY

#### Description

PDE4B-IN-2 is an orally active and selective PDE4B inhibitor with an IC<sub>50</sub> of 15 nM. PDE4B-IN-2 inhibits PDE4D (IC<sub>50</sub>=1.7 μM). PDE4B-IN-2 exhibits potent anti-inflammatory effects<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

PDE4B 15 nM (IC <sub>50</sub> )	PDE4D 1.7 μM (IC <sub>50</sub> )
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#### In Vitro

PDE4B-IN-2 (compound 33) does not inhibit CYP1A2, CYP3A4, CYP2C9, and CYP2D (IC<sub>50</sub>>10 μM)<sup>[1]</sup>. PDE4B-IN-2 inhibits LPS-induced TNF-α production in vitro from mouse peripheral blood mononuclear cell (PBMC; IC<sub>50</sub>=0.5 M)<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

PDE4B-IN-2 (compound 33; 2 mg/kg; po) has a C<sub>max</sub> of 8.7 μg/mL and an AUC of 52.3 μg•h/mL in mice<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Kenji Naganuma, et al. Discovery of selective PDE4B inhibitors. Bioorg Med Chem Lett. 2009 Jun 15;19(12):3174-6.

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

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