

PDE5-IN-13

## Chemical Properties

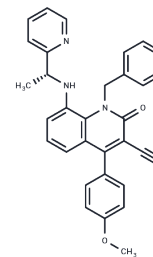
CAS No. :

Formula: C<sub>31</sub>H<sub>26</sub>N<sub>4</sub>O<sub>2</sub>

Molecular Weight: 486.564

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	PDE5-IN-13 (Compound 14b) inhibits phosphodiesterase 5 (PDE5A) with an IC <sub>50</sub> of 3 nM and is applicable in pulmonary arterial hypertension research. It demonstrates high selectivity for its target compared to PDE1, PDE2, PDE3, PDE4, PDE7, PDE8, PDE9, PDE10, and PDE11, and it possesses oral bioavailability.
Targets(IC <sub>50</sub> )	PDE
In vitro	PDE5-IN-13's C3 cyanide group forms hydrogen bonds with D76 and H613 through a water molecule, thereby stabilizing the binding conformation of PDE5-IN-13 [1].
In vivo	PDE5-IN-13 (1500 mg/kg, p.o.) shows no acute toxicity in mice [1]. In a rat model of Monocrotalin-induced pulmonary arterial hypertension, PDE5-IN-13 (5.0 mg/kg, p.o., daily for 21 days) is significantly more effective than Sildenafil citrate (10.0 mg/kg) at increasing mPAP (mean pulmonary artery pressure) and reducing RVHI (right ventricular hypertrophy index).

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0552 mL	10.2762 mL	20.5524 mL
5 mM	0.411 mL	2.0552 mL	4.1105 mL
10 mM	0.2055 mL	1.0276 mL	2.0552 mL
50 mM	0.0411 mL	0.2055 mL	0.411 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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