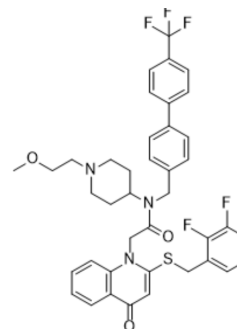


## Rilapladib

<b>Cat. No.:</b>	HY-102004		
<b>CAS No.:</b>	412950-08-4		
<b>Molecular Formula:</b>	C <sub>40</sub> H <sub>38</sub> F <sub>5</sub> N <sub>3</sub> O <sub>3</sub> S		
<b>Molecular Weight:</b>	735.81		
<b>Target:</b>	Phospholipase		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 86.67 mg/mL (117.79 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.3590 mL	6.7952 mL	13.5905 mL
	5 mM	0.2718 mL	1.3590 mL	2.7181 mL
	10 mM	0.1359 mL	0.6795 mL	1.3590 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.25 mg/mL (3.06 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 2.25 mg/mL (3.06 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.25 mg/mL (3.06 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Rilapladib (SB 659032) is a selective Lp-PLA<sub>2</sub> (lipoprotein-associated phospholipase A<sub>2</sub>) inhibitor with an IC<sub>50</sub> of 230 pM<sup>[1]</sup>. Rilapladib (SB 659032) is also a PAFR (Platelet Activating Factor Receptor) antagonist<sup>[2]</sup>.

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

IC<sub>50</sub>: 230 pM (Lp-PLA<sub>2</sub>)<sup>[1]</sup>.

#### In Vitro

Rilapladib through reduction of the PAF biological activity (as PAF inhibitors) and PAF levels could reduce Lp-PLA<sub>2</sub> biosynthesis and prevent the possible adverse effects of Lp-PLA<sub>2</sub><sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

## CUSTOMER VALIDATION

- Patent. US20220257599A1.

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

## REFERENCES

[1]. Shaddinger BC, et al. Platelet aggregation unchanged by lipoprotein-associated phospholipase A<sub>2</sub> inhibition: results from an in vitro study and two randomized phase I trials. PLoS One. 2014 Jan 27;9(1):e83094.

[2]. Athanasios Papakyriakou, et al. Computational Investigation of Darapladib and Rilapladib Binding to Platelet Activating Factor Receptor. A Possible Mechanism of Their Involvement in Atherosclerosis. International Journal of Chemistry; Vol. 6, No. 1; 2014.

---

**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