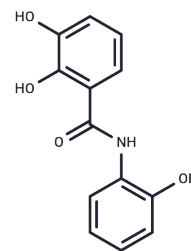


## COX-2-IN-34

## Chemical Properties

CAS No. : 2788578-71-0  
 Formula: C<sub>13</sub>H<sub>11</sub>NO<sub>4</sub>  
 Molecular Weight: 245.23  
 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	COX-2-IN-34 is a selective, orally potent COX-2 inhibitor that shows anti-inflammatory activity without gastric ulcer toxicity during experiments in mice.
Targets(IC50)	COX
In vitro	COX-2-IN-34 (compound 8a) (100 $\mu$ M, 24 h) shows no significant cytotoxicity on RAW264.7 cells.[1] It selectively inhibits COX-1 and COX-2 activities with IC50 values of 34.86 and 0.42 $\mu$ M, respectively, and at 10 $\mu$ M, inhibits COX-2 by 82%.[1]
In vivo	COX-2-IN-34 (compound 8a) (50 mg/kg; orally; 3 days; rats) exhibits no gastric ulcer toxicity in a normal male rat model. COX-2-IN-34 (50 mg/kg; s.c.; rats) shows significant reduction in edema claw volume at 0, 1, 2, 3, 4, and 6 hours post-carrageenan injection compared to the control, with 42.90% and 45.95% inhibition at the 3rd and 4th hour, respectively, closely matching Celecoxib's 45.18% inhibition at 3 hours, demonstrating significant anti-inflammatory effects in carrageenan-induced plantar edema in rats.[1]

## Solubility Information

Solubility	DMSO: 45 mg/mL (183.5 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	4.0778 mL	20.389 mL	40.778 mL
5 mM	0.8156 mL	4.0778 mL	8.1556 mL
10 mM	0.4078 mL	2.0389 mL	4.0778 mL
50 mM	0.0816 mL	0.4078 mL	0.8156 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**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481