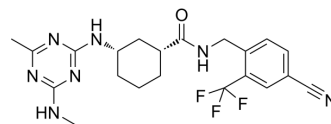


## GSK2256294A

Cat. No.:	HY-19644		
CAS No.:	1142090-23-0		
Molecular Formula:	C <sub>21</sub> H <sub>24</sub> F <sub>3</sub> N <sub>7</sub> O		
Molecular Weight:	447.46		
Target:	Epoxide Hydrolase		
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 : ≥ 47 mg/mL (105.04 mM)  
 \* "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.2348 mL	11.1742 mL	22.3484 mL
	5 mM	0.4470 mL	2.2348 mL	4.4697 mL
	10 mM	0.2235 mL	1.1174 mL	2.2348 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: ≥ 2.08 mg/mL (4.65 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.08 mg/mL (4.65 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.08 mg/mL (4.65 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

GSK2256294A (GSK 2256294) is a selective and orally active inhibitor of soluble epoxide hydrolase (sEH). GSK2256294A inhibits recombinant human sEH, rat sEH orthologs and murine sEH orthologs with IC<sub>50</sub>s of 27, 61 and 189 pM, respectively. GSK2256294A can be used for the research of chronic obstructive pulmonary disease (COPD) and cardiovascular disease<sup>[1]</sup>.

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

IC<sub>50</sub>: 27 pM (recombinant human sEH), 61 pM (rat sEH orthologs), 189 pM (murine sEH orthologs)<sup>[1]</sup>

<b>In Vitro</b>	GSK2256294A (300 pM-10 μM; 2 h) inhibits the conversion of 14,15-EET-d11 to 14,15-DHET-d11 in human, rat and mouse whole blood <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
<b>In Vivo</b>	GSK2256294A (5-30 mg/kg; p.o. twice daily 5 days/week for two weeks) inhibits the generation and maintenance of pulmonary inflammation in cigarette smoke-exposed mice <sup>[1]</sup> . GSK2256294A (30 mg/kg; p.o. twice daily for 8 days) decreases pulmonary inflammation in cigarette smoke-exposed mice <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
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## CUSTOMER VALIDATION

- Diabetes. 2018 Jun;67(6):1162-1172.
- Universidad El Bosque. Maria Fernanda Salazar Romero. 2022 May.

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## REFERENCES

[1]. Podolin PL, et al. In vitro and in vivo characterization of a novel soluble epoxide hydrolase inhibitor. Prostaglandins Other Lipid Mediat. 2013 Jul-Aug;104-105:25-31.

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

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