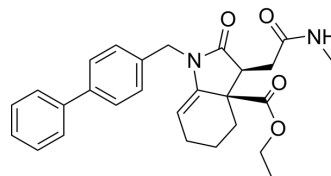


Fumarate hydratase-IN-1

Cat. No.:	HY-100004		
CAS No.:	1644060-37-6		
Molecular Formula:	C ₂₇ H ₃₀ N ₂ O ₄		
Molecular Weight:	446.54		
Target:	Mitochondrial Metabolism		
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 : 50 mg/mL (111.97 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.2394 mL	11.1972 mL	22.3944 mL
		5 mM	0.4479 mL	2.2394 mL	4.4789 mL
10 mM		0.2239 mL	1.1197 mL	2.2394 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.60 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.60 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.60 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Fumarate hydratase-IN-1 (compound 2) is a cell-permeable fumarate hydratase inhibitor. Fumarate hydratase-IN-1 has antiproliferative activity against several cancer cell lines with a mean IC ₅₀ of 2.2 μM ^[1] .
IC₅₀ & Target	Fumarate hydratase ^[1]
In Vitro	Fumarate hydratase-IN-1 inhibits SW620, ACHN, HCT-116, PC3, and SK-MEL-28 cell lines with a mean IC ₅₀ of 2.2 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nature. 2023 Mar;615(7952):490-498.
- Nat Chem Biol. 2022 Jun 16.
- Small. 2023 Jan 12;e2207194.
- Pharmacol Res. 2023 Feb 14;106697.
- Cell Rep. 2023 Oct 12;42(10):113246.

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REFERENCES

[1]. Takeuchi T et al. Identification of Fumarate Hydratase Inhibitors with Nutrient-Dependent Cytotoxicity. J Am Chem Soc, 2015 Jan 21, 137(2): 564-567.

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

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA