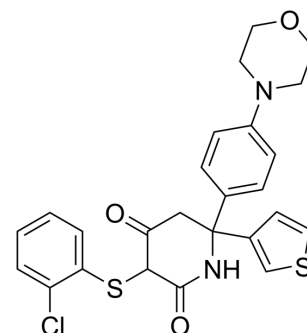


GNE-140 racemate

Cat. No.:	HY-100742		
CAS No.:	1802977-61-2		
Molecular Formula:	C ₂₅ H ₂₃ ClN ₂ O ₃ S ₂		
Molecular Weight:	499		
Target:	Lactate Dehydrogenase		
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 : 20 mg/mL (40.08 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.0040 mL	10.0200 mL	20.0401 mL
5 mM	0.4008 mL	2.0040 mL	4.0080 mL
10 mM	0.2004 mL	1.0020 mL	2.0040 mL

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

BIOLOGICAL ACTIVITY

Description

GNE-140 racemate is a racemate mixture of (R)-GNE-140 and (S)-GNE-140. GNE-140 racemate is a potent lactate dehydrogenase A (LDHA) inhibitor^{[1][2]}.

IC₅₀ & Target

Lactate dehydrogenase A (LDHA)^[1]

In Vitro

Increased glucose consumption distinguishes cancer cells from normal cells and is known as the “Warburg effect” because of increased glycolysis. Lactate dehydrogenase A (LDHA) is a key glycolytic enzyme, a hallmark of aggressive cancers, and believed to be the major enzyme responsible for pyruvate-to-lactate conversion^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Commun. 2023 Jul 14;14(1):4129.

-
- Cell Mol Life Sci. 2019 Apr;76(8):1579-1593.
 - Biochim Biophys Acta Mol Basis Dis. 2022 Sep 20;166550.
 - Am J Physiol Heart Circ Physiol. 2021 Apr 9.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Purkey HE, et al. Cell Active Hydroxylactam Inhibitors of Human Lactate Dehydrogenase with Oral Bioavailability in Mice. ACS Med Chem Lett. 2016 Aug 26;7(10):896-901.

[2]. Ždralavić M, et al. Double genetic disruption of lactate dehydrogenases A and B is required to ablate the "Warburg effect" restricting tumor growth to oxidative metabolism. J Biol Chem. 2018 Oct 12;293(41):15947-15961.

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