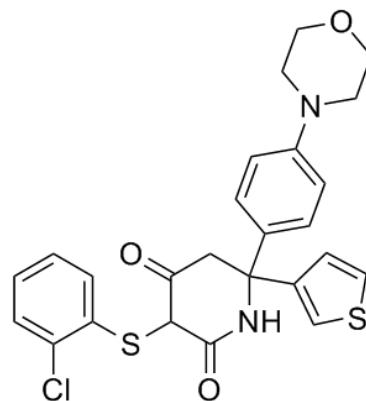


**Product Name** : GNE-140 racemate  
**Cat. No.** : PC-42245  
**CAS No.** : 1802977-61-2  
**Molecular Formula** : C<sub>25</sub>H<sub>23</sub>ClN<sub>2</sub>O<sub>3</sub>S<sub>2</sub>  
**Molecular Weight** : 499.0447  
**Target** : Lactate Dehydrogenase (LDH)  
**Solubility** : DMSO: ≥ 34 mg/mL



## Biological Activity

GNE-140 racemate is the racemate of GNE-140, a novel potent, selective **lactate dehydrogenase (LDH)** inhibitor with IC<sub>50</sub> of 3, 5, and 5 nM for LDHA, LDHB, and LDHC, respectively.

GNE-140 racemate displays no inhibition on malate MDH-1, MDH-2 (IC<sub>50</sub>>10 μM for both enzymes), and no appreciable inhibition against a panel of 301 kinases (<50% inhibition at 1 μM).

GNE-140 racemate perturbs glycolysis and inhibits proliferation in MIA PaCa-2 cells (IC<sub>50</sub>=0.43 μM), decreases glucose uptake (IC<sub>50</sub>=0.47 μM).

Pancreatic cell lines that utilize oxidative OXPHOS rather than glycolysis are inherently resistant to GNE-140, which can be resensitized to GNE-140 with the OXPHOS inhibitor phenformin.

## References

Boudreau A, et al. *Nat Chem Biol.* 2016 Oct;12(10):779-86.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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