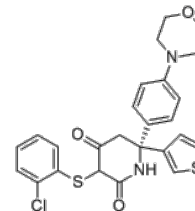


Product Name : (R)-GNE-140
Cat. No. : PC-42246
CAS No. : 2003234-63-5
Molecular Formula : C₂₅H₂₃ClN₂O₃S₂
Molecular Weight : 499.0447
Target : Lactate Dehydrogenase (LDH)
Solubility : 10 mM in DMSO



Biological Activity

(R)-GNE-140 (GNE-140) is a novel potent, selective **lactate dehydrogenase (LDH)** inhibitor with IC₅₀ of 3, 5, and 5 nM for LDHA, LDHB, and LDHC, respectively.

GNE-140 displays no inhibition on malate MDH-1, MDH-2 (IC₅₀>10 μM for both enzymes), and no appreciable inhibition against a panel of 301 kinases (<50% inhibition at 1 μM).

GNE-140 perturbs glycolysis and inhibits proliferation in MIA PaCa-2 cells (IC₅₀=0.43 μM), decreases glucose uptake (IC₅₀=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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