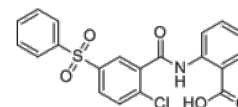


Product Name : BAY-8002
Cat. No. : PC-35589
CAS No. : 724440-27-1
Molecular Formula : C₂₀H₁₄ClNO₅S
Molecular Weight : 415.844
Target : Monocarboxylate Transporter (MCT)
Solubility : 10 mM in DMSO



Biological Activity

BAY-8002 is a novel potent, selective, orally available monocarboxylate transporter 1 (**MCT1**) inhibitor (K_d=7.9 nM), inhibits cellular lactate uptake in DLD-1 cells with IC₅₀ of 8 nM.

BAY-8002 displays no significant activity against in MCT4 expressing cells.

BAY-8002 inhibits cellular SNARF-5 fluorescence change with an IC₅₀ of 85 nM in MCT1-expressing DLD-1 cells and displays excellent selectivity against MCT4 (IC₅₀ >50 μM in EVSA-T cells).

BAY-8002 inhibits lactate uptake in MCT2-expressing oocytes, with ~5-fold lower potency compared to the MCT1 isoform.

BAY-8002 significantly increases intratumor lactate levels and transiently modulates pyruvate levels, inhibits Raji (IC₅₀=0.67 μM) but not WSU-DLCL2 tumor growth.

References

Quanz M, et al. *Mol Cancer Ther.* 2018 Aug 16. pii: molcanther.1253.2017.

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

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