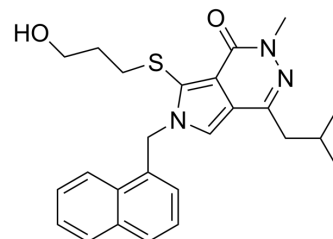


MCT1-IN-2

Cat. No.:	HY-18974
CAS No.:	227321-12-2
Molecular Formula:	C ₂₅ H ₂₉ N ₃ O ₂ S
Molecular Weight:	435.58
Target:	Monocarboxylate Transporter
Pathway:	Membrane Transporter/Ion Channel
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	MCT1-IN-2 is a potent monocarboxylate transporter 1 (MCT1) inhibitor. MCT1-IN-2 has anti-cancer activity ^{[1][2]} .
IC₅₀ & Target	MCT1
In Vitro	MCT1-IN-2 (compound 3) has a pK _i of 9.48 for Jurkat T-cells and inhibits human peripheral blood mononuclear cells (PBMC) proliferation (pIC ₅₀ =8.61) ^[1] . MCT1-IN-2 (compound 1) has an EC ₅₀ of 5.5 nM (MTT assay) and an IC ₅₀ of 105 nM (lactate transport inhibition assay) in human Raji lymphoma cell proliferation ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Clare M Murray, et al. Monocarboxylate transporter MCT1 is a target for immunosuppression. *Nat Chem Biol.* 2005 Dec;1(7):371-6.
- [2]. Hui Wang, et al. Synthesis and structure-activity relationships of pteridine dione and trione monocarboxylate transporter 1 inhibitors. *J Med Chem.* 2014 Sep 11;57(17):7317-24.

Caution: Product has not been fully validated for medical applications. For research use only.

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