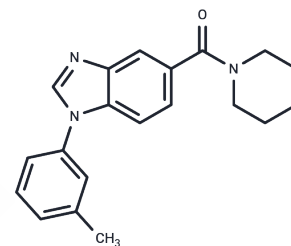


ML-148

Chemical Properties

CAS No. : 451496-96-1
 Formula: C₂₀H₂₁N₃O
 Molecular Weight: 319.4
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	ML-148 is a selective inhibitor of 15-hydroxy prostaglandin dehydrogenase (15-PGDH, IC ₅₀ = 56 nM). ML-148 can be used to profile across a panel of related dehydrogenase or reductase enzymes and in studies about prostaglandin-signaling pathways.
Targets(IC ₅₀)	Dehydrogenase
In vitro	ML148 (10 nM) reduces the apparent Km by half and decreases Vmax by 25%. ML148 shows selectivity with IC ₅₀ s of 36000, >57500, >57500 nM for ALDH1A1, HADH2, HSD17β4, respectively[1].

Solubility Information

Solubility	DMF:PBS(pH 7.2)(1:1): 0.5 mg/mL (1.57 mM),Sonication is recommended. DMSO: 11 mg/mL (34.44 mM),Sonication is recommended. DMF: 25 mg/mL (78.27 mM),Sonication is recommended. Ethanol: 10 mg/mL (31.31 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1309 mL	15.6544 mL	31.3087 mL
5 mM	0.6262 mL	3.1309 mL	6.2617 mL
10 mM	0.3131 mL	1.5654 mL	3.1309 mL
50 mM	0.0626 mL	0.3131 mL	0.6262 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Niesen FH, et al. High-affinity inhibitors of human NAD-dependent 15-hydroxyprostaglandin dehydrogenase: mechanisms of inhibition and structure-activity relationships. PLoS One. 2010 Nov 2;5(11):e13719.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481