

CAY10770

Chemical Properties

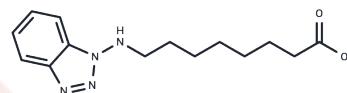
CAS No. : 2428734-45-4

Formula: C₁₄H₂₀N₄O₂

Molecular Weight: 276.33

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	CAY10770 is an inhibitor of the cytochrome P450 (CYP) isoform CYP4Z1 (IC ₅₀ = 5.9 μM). It is selective for CYP4Z1 over CYP4A11, CYP4F2, CYP4F3a, CYP4F3b (IC ₅₀ s = 187-282 μM) but does inhibit CYP4F8 and CYP4F12 (IC ₅₀ s = 167 and 91 μM, respectively). CAY10770 (3 μM) inhibits the production of 14(15)-EET, 19-HETE, and 14(15)-DiHET by 83, 86, and 80%, respectively, in T47D breast cancer cells expressing CYP4Z1.
Targets(IC50)	Others,Cytochromes P450

Solubility Information

Solubility	Chloroform: 10 mg/mL (36.19 mM),Sonication is recommended. Methyl Acetate: 1 mg/mL (3.62 mM),Sonication is recommended. Ethanol: 1 mg/mL (3.62 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	3.6189 mL	18.0943 mL	36.1886 mL
5 mM	0.7238 mL	3.6189 mL	7.2377 mL
10 mM	0.3619 mL	1.8094 mL	3.6189 mL
50 mM	0.0724 mL	0.3619 mL	0.7238 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

Kowalski, J.P., McDonald, M.G., Pelletier, R.D., et al. Design and characterization of the first selective and potent mechanism-based inhibitor of cytochrome P450 4Z1J. *Med. Chem.* 63(9)4824-4836(2020)

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