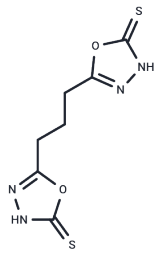
Data Sheet (Cat.No.T37832)

CAY10761

Chemical Properties



CAS No. : 333409-31-7

Formula: C7H8N4O2S2

Molecular Weight: 244.29

Appearance:

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	CAY10761 is an inhibitor of ectonucleotide pyrophosphatase/phosphodiesterase 1 (ENPP1; IC50s = 467 and 429 μM for the human and snake venom enzymes, respectively).1,2 It also inhibits mushroom tyrosinase (Ki = 1.9 μM) and urease from jack bean, P. mirabilis, and B. pasteurii (IC50s = 0.093, <0.125, and 0.089 mM, respectively, at pH 8.2).3,4
Targets(IC50)	Others

Solubility Information

Solubility	DMF: 30 mg/mL (122.8 mM),Sonication is recommended. DMSO: 30 mg/mL (122.8 mM),Sonication is recommended. DMSO:PBS (pH 7.2) (1:4): 0.2 mg/mL (0.82 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0935 mL	20.4675 mL	40.935 mL
5 mM	0.8187 mL	4.0935 mL	8.187 mL
10 mM	0.4093 mL	2.0467 mL	4.0935 mL
50 mM	0.0819 mL	0.4093 mL	0.8187 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.

Reference

Khan, K.M., Fatima, N., Rasheed, M., et al. 1,3,4-Oxadiazole-2(3H)-thione and its analogues: A new class of non-competitive nucleotide pyrophosphatases/phosphodiesterases 1 inhibitors. Bioorg. Med. Chem. 17(22), 7816-7822 (2009).

Onyedibe, K.I., Wang, M., and Sintim, H.O. ENPP1, an old enzyme with new functions, and small molecule inhibitors - A STING in the tale of ENPP1. Molecules 24(22), E4192 (2019).

Ghani, U., and Ullah, N. New potent inhibitors of tyrosinase: Novel clues to binding of 1,3,4-thiadiazole-2(3H)-thiones, 1,3,4-oxadiazole-2(3H)-thiones, 4-amino-1,2,4-triazole-5(4H)-thiones, and substituted hydrazides to the dicopper active site. Bioorg. Med. Chem. 18(11), 4042-4048 (2010).

Amtul, Z., Rasheed, M., Choudhary, M.I., et al. Kinetics of novel competitive inhibitors of urease enzymes by a focused library of oxadiazoles/thiadiazoles and triazoles. Biochem. Biophys. Res. Commun. 319(3), 1053-1063 (2004).