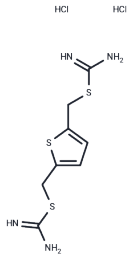
Data Sheet (Cat.No.T1856)

TargetMol

TPT-260 Dihydrochloride

Chemical Properties



CAS No. : 2076-91-7

Formula: C8H14Cl2N4S3

Molecular Weight: 333.32

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	TPT-260 Dihydrochloride (NSC55712) is a thiophene thiourea derivative with molecule weight 260.00 in free base form.
Targets(IC50)	Others
Kinase Assay	Lyophilized Cdc42 protein is reconstituted to 5 mg/mL in a buffer consisting of 50 mM Tris, 0.5 mM MgCl2, 50 mM NaCl, 3% (wt/vol) sucrose, and 0.6% dextran. The stock solution is then diluted to 1 μM in 5 mM phosphate buffer, pH 7.4. Into a quartz cuvettete containing Cdc42 solution, aliquots of ZCL278 are added and incubated for 5 min before each fluorescent measurement. The excitation wavelength is 275 nm, and the fluorescence of tryptophan at 350 nm is measured after each addition. The titration curve is fitted using the equimolar specific binding model in GraphPad, and the Kd is calculated[1].

Solubility Information

Solubility	H2O: 16.66 mg/mL (49.98 mM),Sonication and heating are recommended. DMSO: 9 mg/mL (27 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (3 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0001 mL	15.0006 mL	30.0012 mL
5 mM	0.600 mL	3.0001 mL	6.0002 mL
10 mM	0.300 mL	1.5001 mL	3.0001 mL
50 mM	0.060 mL	0.300 mL	0.600 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

Matthews, H., Deakin, J., Rajab, M., Idris-Usman, M., & Nirmalan, N. (2017). Investigating antimalarial drug interactions of emetine dihydrochloride hydrate using CalcuSyn-based interactivity calculations. PLOS ONE, 12(3), e0173303. doi: 10.1371/journal.pone.0173303

Hawks, Z., Shimony, J., Rutlin, J., Grange, D., Christ, S., & White, D. (2017). Pretreatment cognitive and neural differences between sapropterin dihydrochloride responders and non-responders with phenylketonuria. Molecular Genetics And Metabolism Reports, 12, 8-13. doi: 10.12016/j.ymgmr.2017.01.2013