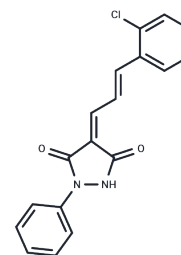


CPYPP

Chemical Properties

CAS No. :	310460-39-0
Formula:	C ₁₈ H ₁₃ ClN ₂ O ₂
Molecular Weight:	324.76
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	CPYPP is an inhibitor of DOCK2-Rac1 interaction. CPYPP binds to DOCK2 DHR-2 domain and inhibits the guanine nucleotide exchange factor (GEF) activity of DOCK2DHR-2 for Rac1 in a dose-dependent manner (IC ₅₀ : 22.8 μM). CPYPP also inhibits DOCK180, DOCK5 and less DOCK9
Targets(IC ₅₀)	Others
In vitro	CPYPP as a small-molecule inhibitor of DOCK2. CPYPP bound to DOCK2 DHR-2 domain in a reversible manner and inhibited its catalytic activity in vitro. When lymphocytes were treated with CPYPP, both chemokine receptor- and antigen receptor-mediated Rac activation were blocked, resulting in marked reduction of chemotactic response and T cell activation. These results provide a rationale of and a chemical scaffold for development of the DOCK2-targeting immunosuppressant[1].

Solubility Information

Solubility	DMSO: 23 mg/mL (70.82 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: 2 mg/mL (6.16 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0792 mL	15.396 mL	30.792 mL
5 mM	0.6158 mL	3.0792 mL	6.1584 mL
10 mM	0.3079 mL	1.5396 mL	3.0792 mL
50 mM	0.0616 mL	0.3079 mL	0.6158 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

Nishikimi A, et al. Blockade of inflammatory responses by a small-molecule inhibitor of the Rac activator DOCK2. Chem Biol. 2012 Apr 20;19(4):488-97.

Ferrandez Y , Zhang W , Peurois F , et al. Allosteric inhibition of the guanine nucleotide exchange factor DOCK5 by a small molecule[J]. entific Reports, 2017, 7(1):14409.

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