

NTP42

Chemical Properties

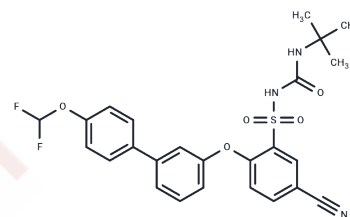
CAS No. : 2055599-51-2

Formula: C₂₅H₂₃F₂N₃O₅S

Molecular Weight: 515.53

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	NTP42 is an antagonist of thromboxane A ₂ (TXA ₂) receptor (IC ₅₀ of 3.278 nM)
Targets (IC ₅₀)	PPAR, Prostaglandin Receptor
In vivo	From haemodynamic assessments, NTP42 reduced the MCT-induced PAH, including mean pulmonary arterial pressure (mPAP) and right systolic ventricular pressure (RSVP), being at least comparable to the standard-of-care drugs Sildenafil or Selexipag in bringing about these effects. Moreover, NTP42 was superior to Sildenafil and Selexipag in significantly reducing pulmonary vascular remodelling, inflammatory mast cell infiltration and fibrosis in MCT-treated animals[1].

Solubility Information

Solubility	DMSO: 30 mg/mL (58.19 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 (3.88 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	1.9398 mL	9.6988 mL	19.3975 mL
5 mM	0.388 mL	1.9398 mL	3.8795 mL
10 mM	0.194 mL	0.9699 mL	1.9398 mL
50 mM	0.0388 mL	0.194 mL	0.388 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

B. Therese KINSELLA, et al. Thromboxane receptor antagonists. WO2016203314A1.

Hao Y, Ou Y, Zhang C, et al. Seratrodast, a thromboxane A2 receptor antagonist, inhibits neuronal ferroptosis by promoting GPX4 expression and suppressing JNK phosphorylation. Brain Research. 2022, 1795: 148073.

Eamon Mulvaney, et al. NTP42, a novel antagonist of the thromboxane receptor, attenuates experimentally induced pulmonary arterial hypertension.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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