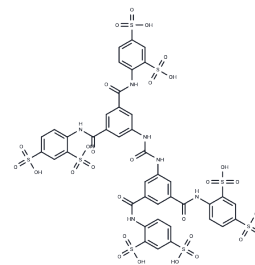


NF449

## Chemical Properties

CAS No. :	389142-38-5
Formula:	C41H32N6O29S8
Molecular Weight:	1329.24
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	NF449 is a potent antagonist of the P2X1 receptor, displaying IC50 values of 0.28 nM, 0.69 nM, and 120 nM for rP2X1, rP2X1+5, and P2X2+3, respectively. It acts selectively against Gα G proteins (G Protein). NF449 inhibits the binding rate of GTP[γS] to Gα-s, suppresses the stimulation of adenylate cyclase activity, and blocks the coupling of β-adrenergic receptors with Gs.
Targets(IC50)	P2X Receptor
In vitro	NF449 hinders the binding rate of GTP[γS] to rGα-s while having minimal effect on rGiα-1 binding (IC 50 = 140 nM). It suppresses the stimulation of adenylate cyclase activity in S49 cyc- membranes (lacking endogenous Gα) through exogenously added Gα-s and obstructs the coupling of β-adrenergic receptors with Gs (EC 50 = 7.9 μM).
In vivo	At a dosage of 10 mg/kg, NF449 inhibits platelet aggregation triggered by 5 g/mL collagen in WT mice without affecting aggregation induced by 5 μM ADP. At a higher dose (50 mg/kg), NF449 inhibits ex vivo platelet aggregation in response to both 10 g/mL collagen and 5 μM ADP, indicating non-selective inhibition of P2Y1 and/or P2Y12 receptors.

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.7523 mL	3.7615 mL	7.5231 mL
5 mM	0.1505 mL	0.7523 mL	1.5046 mL
10 mM	0.0752 mL	0.3762 mL	0.7523 mL
50 mM	0.015 mL	0.0752 mL	0.1505 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.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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