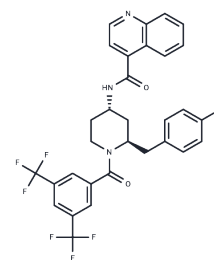


NKP608

Chemical Properties

CAS No. : 177707-12-9
 Formula: C₃₁H₂₄ClF₆N₃O₂
 Molecular Weight: 619.99
 Storage: Store at low temperature
 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	NKP608 is a selective and highly effective neurokinin-1 (NK-1) receptor antagonist with anticancer and antianxiety activities, inhibiting the proliferation of human colorectal cancer cells through the Wnt signaling pathway.
Targets(IC50)	Neurokinin receptor
In vitro	NKP608 inhibited the binding of H-SP to bovine retina with an IC ₅₀ of 2.6 nM, and to rat striatum and gerbil midbrain membranes with IC ₅₀ s of 27 and 13 nM. [5] In human astrocytoma cell (U-373) cultures NKP608 inhibited the SP induced increase in IP1 accumulation with an IC ₅₀ of 2.6 nM, indicating potent functional antagonism at the human receptor. [5]
In vivo	NKP608 (0.03, 0.1, 0.3, 1 or 3 mg/kg) was given orally 2, 5 or 24 h prior to the i.c.v. administration of 1 mg SPOMe. NKP608 dose-dependently attenuated SPOMe-induced hind foot thumping. [5]

Solubility Information

Solubility	H ₂ O: Insoluble., DMSO: 80 mg/mL (129.03 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: 3.3 mg/mL (5.32 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	1.6129 mL	8.0646 mL	16.1293 mL
5 mM	0.3226 mL	1.6129 mL	3.2259 mL
10 mM	0.1613 mL	0.8065 mL	1.6129 mL
50 mM	0.0323 mL	0.1613 mL	0.3226 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

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Rupniak NM, Carlson EJ, Shephard S, et al. Comparison of the functional blockade of rat substance P (NK1) receptors by GR205171, RP67580, SR140333 and NKP-608. *Neuropharmacology.* 2003 Aug;45(2):231-41.

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Vassout A, et al. NKP608: a selective NK-1 receptor antagonist with anxiolytic-like effects in the social interaction and social exploration test in rats. *Regul Pept.* 2000 Dec 22;96(1-2):7-16.

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