

## NFATc1-IN-1

## Chemical Properties

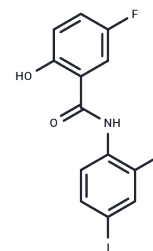
CAS No. : 1912422-56-0

Formula: C<sub>13</sub>H<sub>8</sub>F<sub>2</sub>INO<sub>2</sub>

Molecular Weight: 375.11

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	NFATc1-IN-1 (also known as compound A04) is a highly effective inhibitor of osteoclast formation induced by RANKL, with an IC <sub>50</sub> of 1.57 μM. It exerts its anti-osteoclastogenic effects by attenuating the RANKL-induced nuclear translocation of NFATc1. Due to its remarkable properties, NFATc1-IN-1 holds significant potential for advancing research related to osteoclastic diseases [1].
Targets(IC <sub>50</sub> )	Others,RANKL/RANK
In vitro	NFATc1-IN-1 (0、0.5、1.0、1.5、2.0、2.5 μM, 4 days) exhibits potent inhibitory activities on osteoclast formation and function, which eventually translates into decreased bone resorption while showing no cytotoxic effects towards osteoclast precursor cells at concentrations of as high as 2.5 μM.[1] NFATc1-IN-1 (1.5-2.5 μM, 24 h) blocks NFATc1 nuclear translocation and decreases the level of NFATc1.[1]

## Solubility Information

Solubility	DMSO: 112.5 mg/mL (299.91 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.6659 mL	13.3294 mL	26.6588 mL
5 mM	0.5332 mL	2.6659 mL	5.3318 mL
10 mM	0.2666 mL	1.3329 mL	2.6659 mL
50 mM	0.0533 mL	0.2666 mL	0.5332 mL

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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

Chen CL, et al. Design, synthesis and SARs of novel salicylanilides as potent inhibitors of RANKL-induced osteoclastogenesis and bone resorption. *Eur J Med Chem.* 2016 ; 117:70-84.

Sun J, et al. Histopathologic features of degenerative aortic valve and its mechanisms. *Zhonghua Yi Xue Za Zhi.* 2013 ; 93(4):280-284.

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