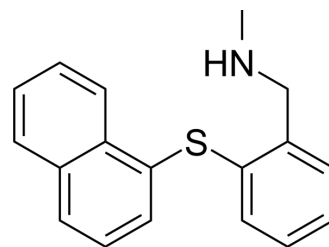


IFN alpha-IFNAR-IN-1 hydrochloride

Cat. No.:	HY-12836A
CAS No.:	2070014-98-9
Molecular Formula:	C ₁₈ H ₁₈ ClNS
Molecular Weight:	315.86
Target:	IFNAR
Pathway:	Immunology/Inflammation
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 2 years; -20°C, 1 year (sealed storage, away from moisture)



H-Cl

SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (316.60 mM; Need ultrasonic)					
	H ₂ O : 16.67 mg/mL (52.78 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		3.1660 mL	15.8298 mL	31.6596 mL
5 mM			0.6332 mL	3.1660 mL	6.3319 mL	
	10 mM		0.3166 mL	1.5830 mL	3.1660 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (6.59 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (6.59 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (6.59 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	IFN alpha-IFNAR-IN-1 hydrochloride is a nonpeptidic, low-molecular-weight inhibitor of the interaction between IFN-α and IFNAR. IFN alpha-IFNAR-IN-1 hydrochloride inhibits modified Vaccinia virus ankara (MVA)-induced IFN-α responses in murine bone-marrow-derived, Flt3- L-differentiated pDC cultures (BM-pDCs) (IC ₅₀ =2-8 μM) ^[1] .
In Vitro	IFN alpha-IFNAR-IN-1 (compound 1) (18 μM; 24 h) specifically inhibits MVA-induced IFN-a responses by BMpDCs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nature. 2022 Sep;609(7928):785-792.
- Arthritis Rheumatol. 2020 Jun;72(6):1003-1012.
- J Med Virol. 2023 Nov 7.
- Adv Healthc Mater. 2023 Jan 30;e2202830.
- Pharmacol Res. 2022 Dec 16;187:106615.

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REFERENCES

[1]. Geppert T, et al. Immunosuppressive small molecule discovered by structure-based virtual screening for inhibitors of protein-protein interactions. Angew Chem Int Ed Engl. 2012 Jan 2;51(1):258-61.

Caution: Product has not been fully validated for medical applications. For research use only.

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