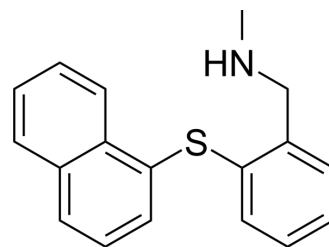


## IFN alpha-IFNAR-IN-1 hydrochloride

<b>Cat. No.:</b>	HY-12836A
<b>CAS No.:</b>	2070014-98-9
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>18</sub> ClNS
<b>Molecular Weight:</b>	315.86
<b>Target:</b>	IFNAR
<b>Pathway:</b>	Immunology/Inflammation
<b>Storage:</b>	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

<b>In Vitro</b>	DMSO : 100 mg/mL (316.60 mM; Need ultrasonic)					
	H <sub>2</sub> O : 16.67 mg/mL (52.78 mM; Need ultrasonic)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		3.1660 mL	15.8298 mL	31.6596 mL
<b>5 mM</b>			0.6332 mL	3.1660 mL	6.3319 mL	
	<b>10 mM</b>		0.3166 mL	1.5830 mL	3.1660 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	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

<b>Description</b>	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 <sub>50</sub> =2-8 μM) <sup>[1]</sup> .
<b>In Vitro</b>	IFN alpha-IFNAR-IN-1 (compound 1) (18 μM; 24 h) specifically inhibits MVA-induced IFN-a responses by BMpDCs <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Nature. 2022 Sep;609(7928):785-792.
- Arthritis Rheumatol. 2020 Jun;72(6):1003-1012.
- Adv Healthc Mater. 2023 Jan 30;e2202830.
- Pharmacol Res. 2022 Dec 16;187:106615.
- Cell Death Dis. 2020 Dec 11;11(12):1050.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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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.

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

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