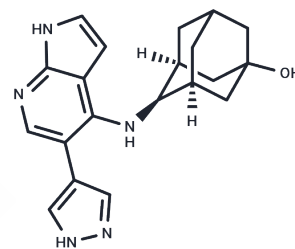


JAK1-IN-12

Chemical Properties

CAS No. :	2945204-95-3
Formula:	C ₂₀ H ₂₃ N ₅ O
Molecular Weight:	349.43
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	JAK1-IN-12, a selective inhibitor of JAK1, exhibits an IC ₅₀ of 0.0246 μM and demonstrates IC ₅₀ values of 0.423 μM, 0.410 μM, and 1.12 μM for JAK2, JAK3, and TYK2, respectively. It promotes hair growth in mice and is applicable for researching immune and inflammatory diseases [1].
Targets(IC ₅₀)	JAK
In vitro	HDAC-IN-57 (Compound 12b) inhibits JAK1 and JAK2 in Ba/F3-TEL-JAK1 cell lines, with IC ₅₀ values of 0.110 μM and 6.105 μM, respectively [1]. At a concentration of 1 μM, HDAC-IN-57 (Compound 12b) exhibits strong interactions with JAK1, JAK3, PKD2, HPK1, and AurB in kinase panel assays [1].
In vivo	JAK1-IN-12 (Compound 12b) was administered as a 2% solution in 10% DMSO, applied daily for one month, to 8-week-old C57/B6 mice to enhance hair growth in the shaved dorsal back region [1]. Animal Model: C57/B6 mice [1] Dosage: 2% in 10% DMSO solution Administration: Topical application; daily for 1 month Result: Induced skin darkening within 9 days and stimulated new hair growth within 13 days.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8618 mL	14.309 mL	28.618 mL
5 mM	0.5724 mL	2.8618 mL	5.7236 mL
10 mM	0.2862 mL	1.4309 mL	2.8618 mL
50 mM	0.0572 mL	0.2862 mL	0.5724 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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