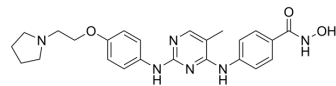


## HDAC/JAK/BRD4-IN-1

<b>Cat. No.:</b>	HY-156273												
<b>CAS No.:</b>	2755325-84-7												
<b>Molecular Formula:</b>	C <sub>24</sub> H <sub>28</sub> N <sub>6</sub> O <sub>3</sub>												
<b>Molecular Weight:</b>	448.52												
<b>Target:</b>	Apoptosis; HDAC; Epigenetic Reader Domain; JAK												
<b>Pathway:</b>	Apoptosis; Cell Cycle/DNA Damage; Epigenetics; JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Stem Cell/Wnt												
<b>Storage:</b>	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
Powder	-20°C	3 years											
	4°C	2 years											
In solvent	-80°C	6 months											
	-20°C	1 month											



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (222.96 mM); ultrasonic and warming and heat to 80°C				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.2296 mL	11.1478 mL	22.2956 mL
		5 mM	0.4459 mL	2.2296 mL	4.4591 mL
		10 mM	0.2230 mL	1.1148 mL	2.2296 mL
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: 2.5 mg/mL (5.57 mM); Clear solution; Need ultrasonic</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: 2.5 mg/mL (5.57 mM); Clear solution; Need ultrasonic</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	HDAC/JAK/BRD4-IN-1(compound 25ap) is a potent HDAC/JAK/BRD4 triple inhibitor. HDAC/JAK/BRD4-IN-1 inhibit cell growth and induces apoptosis in MDA-MB-231 cells, and shows anticancer activity in vivo <sup>[1]</sup> .
--------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### REFERENCES

[1]. Zhao C, et al. Discovery of Novel Fedratinib-Based HDAC/JAK/BRD4 Triple Inhibitors with Remarkable Antitumor Activity against Triple Negative Breast Cancer [published online ahead of print, 2023 Oct 5]. J Med Chem. 2023;10.1021/acs.jmedchem.3c01242.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA