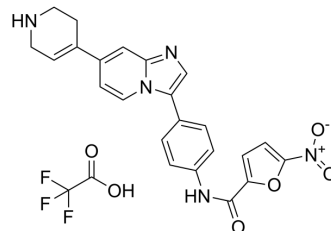


## W1131 TFA

<b>Cat. No.:</b>	HY-153190A		
<b>Molecular Formula:</b>	C <sub>25</sub> H <sub>20</sub> F <sub>3</sub> N <sub>5</sub> O <sub>6</sub>		
<b>Molecular Weight:</b>	543.45		
<b>Target:</b>	Ferroptosis; STAT		
<b>Pathway:</b>	Apoptosis; JAK/STAT Signaling; Stem Cell/Wnt		
<b>Storage:</b>	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 (184.01 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>		1.8401 mL	9.2005 mL	18.4010 mL
		<b>5 mM</b>		0.3680 mL	1.8401 mL	3.6802 mL
<b>10 mM</b>		0.1840 mL	0.9200 mL	1.8401 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: 2.5 mg/mL (4.60 mM); Clear solution; Need ultrasonic  2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (4.60 mM); Clear solution; Need ultrasonic					

### BIOLOGICAL ACTIVITY

<b>Description</b>	W1131 TFA is a potent STAT3 inhibitor that induces ferroptosis. W1131 inhibits cancer progression in subcutaneous xenograft, organoid, and PDX models of gastric cancer. W1131 effectively alleviates cancer cell chemoresistance to 5-FU (HY-90006). W1131 regulates the cell cycle, DNA damage response, and oxidative phosphorylation, including the IL6-JAK-STAT3 pathway and the ferroptosis pathway <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	STAT3 <sup>[1]</sup>

### REFERENCES

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[1]. Ouyang S, et al. Inhibition of STAT3-ferroptosis negative regulatory axis suppresses tumor growth and alleviates chemoresistance in gastric cancer. Redox Biol. 2022 Jun;52:102317.

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

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