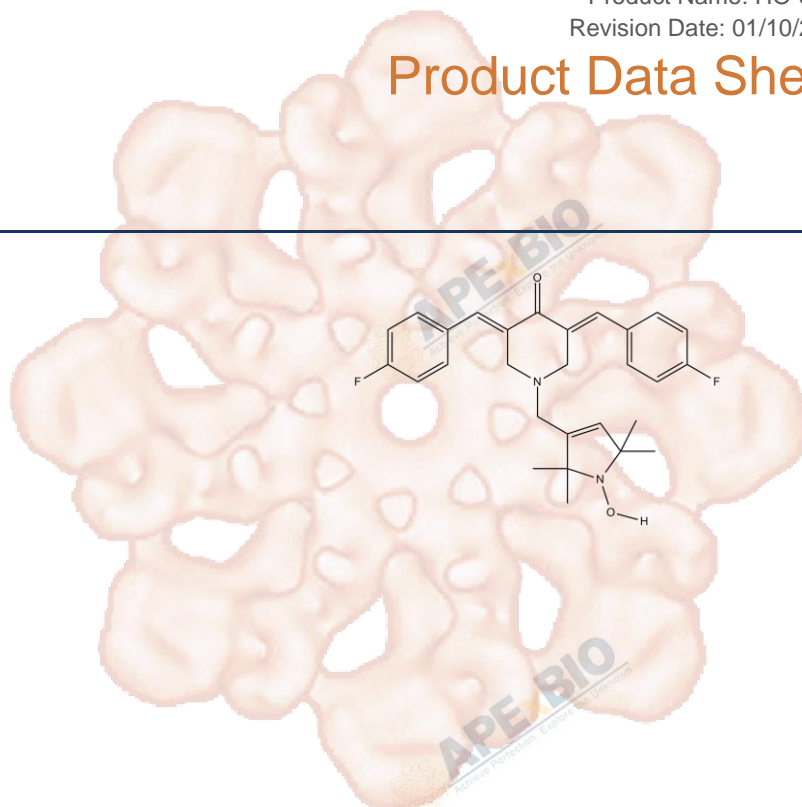


# Product Data Sheet

## HO-3867

<b>Cat. No.:</b>	B4970
<b>CAS No.:</b>	1172133-28-6
<b>Formula:</b>	C <sub>28</sub> H <sub>30</sub> F <sub>2</sub> N <sub>2</sub> O <sub>2</sub>
<b>M.Wt:</b>	464.55
<b>Synonyms:</b>	
<b>Target:</b>	JAK/STAT Signaling
<b>Pathway:</b>	STAT
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

insoluble in EtOH; insoluble in H<sub>2</sub>O; ≥18.15 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass Concentration	Mass		
			1mg	5mg	10mg
		<b>1 mM</b>	2.1526 mL	10.7631 mL	21.5262 mL
		<b>5 mM</b>	0.4305 mL	2.1526 mL	4.3052 mL
		<b>10 mM</b>	0.2153 mL	1.0763 mL	2.1526 mL

Please refer to the solubility information to select the appropriate solvent.

### Biological Activity

Shortsummary

STAT3 inhibitor, selective

IC<sub>50</sub> & Target

#### Cell Viability Assay

In Vitro

Cell Line:	A2780 human epithelial ovarian cancer cell line, ovarian cancer cell lines used (SKOV3, OVCAR3, A2780R, and OV4)
Preparation method:	Soluble in DMSO. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	10 μmol/L, 20 μmol/L, 24 h

	Applications:	HO-3867 was cytotoxic to A2780 and other ovarian cancer cell lines. HO-3867 (20 µmol/L) induced G2 -M cell cycle arrest in A2780 cells. HO-3867 induced apoptosis in A2780 cells. HO-3867 induced apoptosis and inhibited JAK/STAT3 signaling in human ovarian cancer cell lines.
In Vivo	<b>Animal experiment</b>	
	Animal models:	Ovarian cancer tumor xenografted mice model
	Dosage form:	Oral gavage, 25, 50, and 100 ppm
	Applications:	In ovarian cancer tumor xenografted mice, HO-3867 inhibited the growth of xenograft tumor in mice. HO-3867 inhibited pSTAT3 and downregulated the STAT3-targeting proteins in vivo. HO-3867 (100 ppm p.o.) attenuated left-heart-failure-induced pulmonary hypertension by decreasing oxidative stress and increasing PTEN expression in the lung of rats.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

## Product Citations

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

## References

- [1]. Selvendiran K, Tong L, Bratasz A, et al. Anticancer efficacy of a difluorodiarlylidenyl piperidone (HO-3867) in human ovarian cancer cells and tumor xenografts[J]. Molecular cancer therapeutics, 2010, 9(5): 1169-1179.
- [2]. Ravi Y, Selvendiran K, Naidu S K, et al. Pulmonary hypertension secondary to left-heart failure involves peroxynitrite-induced downregulation of PTEN in the lung[J]. Hypertension, 2013: HYPERTENSIONAHA. 111.00514.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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**APEx BIO Technology**

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