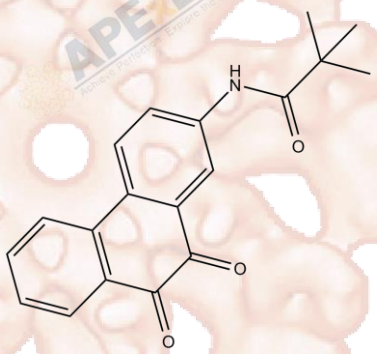
Product Data Sheet

SF1670



Cat. No.: B4787
CAS No.: 345630-40-2
Formula: C19H17NO3
M.Wt: 307.34
Synonyms:
Target:
Pathway:
Storage: Desiccate at -20°C

Solvent & Solubility

In Vitro

insoluble in EtOH; insoluble in H2O; ⩾15.37 mg/mL in DMSO

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	3.2537 mL	16.2686 mL	32.5373 mL
5 mM	0.6507 mL	3.2537 mL	6.5075 mL
10 mM	0.3254 mL	1.6269 mL	3.2537 mL

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

Biological Activity

Shortsummary	PTEN inhibitor, potent and specific
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Transplanted mouse neutrophils
Preparation method:	The solubility of this compound in DMSO is >15.4 mg/mL. 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:	500 nM

	Applications:	SF1670 enhanced PtdIns(3,4,5)P3 signaling in transplanted neutrophils. SF1670 elevated Akt phosphorylation in murine cells. Pretreatment with SF1670 significantly augmentd PtdIns(3,4,5)P3 level in mouse neutrophils. SF1670 (500 nM)–pretreated neutrophils showed higher (maximal) superoxide production in neutrophils stimulated by 500 nM fMLP.
In Vivo	**Animal experiment**	
	Animal models:	Neutropenic mice
	Dosage form:	Intravenous injection, 500 nM
	Applications:	Pretreatment of SF1670 (500 nM i.v.) augmented bacteria-killing capability in neutropenic mice in both peritonitis and bacterial pneumonia, and decreased the mortality of neutropenia-related pneumonia. In a mouse neutropenia-associated bacterial pneumonia model, SF1670 increased the bacteria-killing capability and relieved inflammation-associated lung damage.
	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.

References

[1]. Li Y, Prasad A, Jia Y, et al. Pretreatment with phosphatase and tensin homolog deleted on chromosome 10 (PTEN) inhibitor SF1670 augments the efficacy of granulocyte transfusion in a clinically relevant mouse model[J]. Blood, 2011, 117(24): 6702-6713.

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 APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm 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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