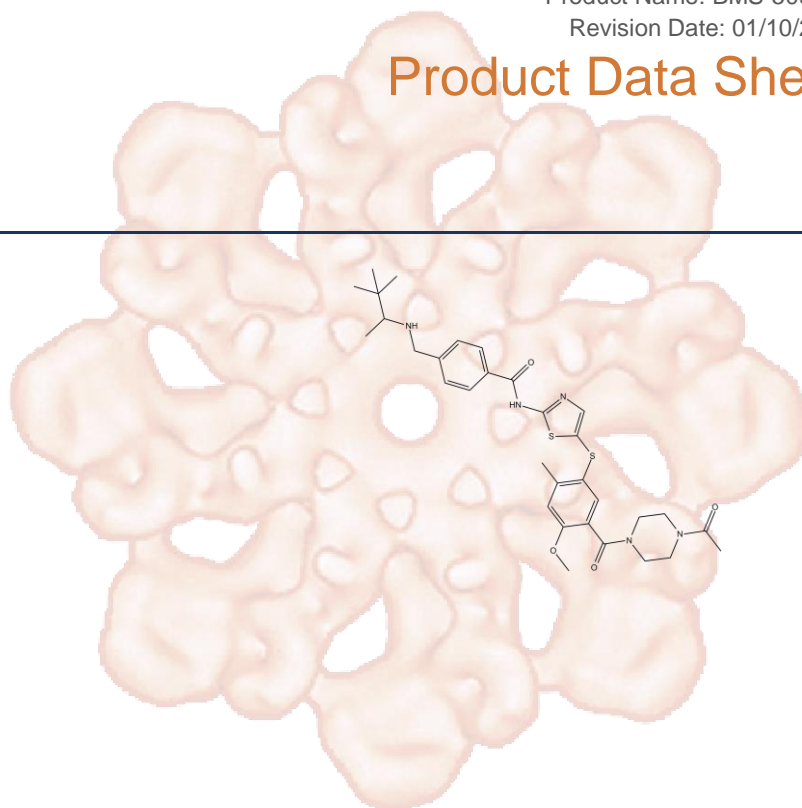


## BMS-509744

<b>Cat. No.:</b>	A3250
<b>CAS No.:</b>	439575-02-7
<b>Formula:</b>	C <sub>32</sub> H <sub>41</sub> N <sub>5</sub> O <sub>4</sub> S <sub>2</sub>
<b>M.Wt:</b>	623.83
<b>Synonyms:</b>	BMS 509744;BMS509744
<b>Target:</b>	Tyrosine Kinase
<b>Pathway:</b>	ITK
<b>Storage:</b>	Store at -20°C



## Solvent & Solubility

Soluble in DMSO

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
		<b>1 mM</b>	1.6030 mL	8.0150 mL	16.0300 mL
		<b>5 mM</b>	0.3206 mL	1.6030 mL	3.2060 mL
		<b>10 mM</b>	0.1603 mL	0.8015 mL	1.6030 mL

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

## Biological Activity

Shortsummary

Itk inhibitor,potent and selective

IC<sub>50</sub> & Target

19 nM (Itk)

In Vitro

### Cell Viability Assay

Cell Line:	Jurkat T cells and A549 lung carcinoma cells
Preparation method:	This compound is 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:	0.1 ~ 10 μM
Applications:	In Jurkat T-cells, BMS-509744 dose-dependently inhibited tyrosine

phosphorylation of phospholipase Cy1 (PLCy1) induced by anti-CD3 antibodies. In A549 lung carcinoma cells, Itk expression of which was not evident, BMS-509744 did not exhibit significant inhibition on cellular tyrosine or PLCy1 phosphorylation induced by epidermal growth factors, at the concentration even up to 10  $\mu$ M.

#### Animal experiment

Animal models: Mice

Dosage form: 5, 25 and 50 mg/kg; s.c. or i.p.; b.i.d., for 3 days

Applications: In mice treated with anti-CD3 antibodies, BMS-509744 at the dose of 50 mg/kg inhibited IL-2 production by 50%. In a mouse model of ovalbumin-induced allergy/asthma, BMS-509744 dose-dependently reduced total cell and eosinophil infiltration into the lung, which indicated reduced lung inflammation. The reduction reached statistical significance at the dose of 25 mg/kg administered subcutaneously.

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.

In Vivo

## Product Citations

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

## References

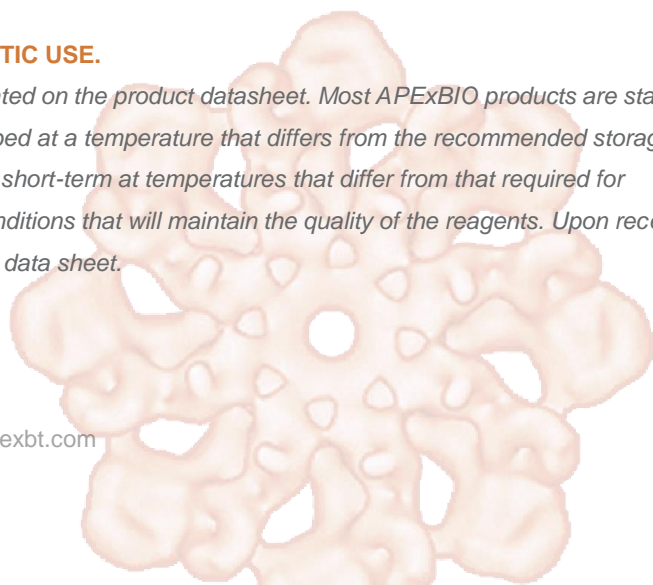
[1]. Lin, T.A., et al., Selective Itk inhibitors block T-cell activation and murine lung inflammation. *Biochemistry*, 2004. 43(34): p. 11056-62.

## 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.*



**APExBIO Technology**

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