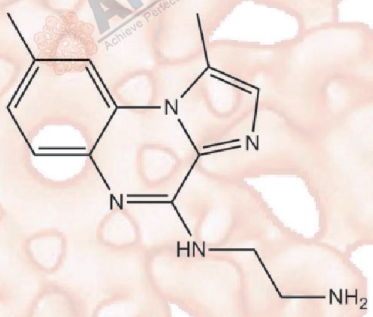
Product Data Sheet

BMS-345541(free base)

Cat. No.: B4655
CAS No.: 445430-58-0
Formula: C14H17N5
M.Wt: 255.32
Synonyms:
Target: Chromatin/Epigenetics
Pathway: HDAC
Storage: Store at -20°C



Solvent & Solubility

insoluble in H2O; ⩾70 mg/mL in DMSO; ⩾2.49 mg/mL in EtOH with gentle warming and ultrasonic

In Vitro — Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	3.9167 mL	19.5833 mL	39.1665 mL
5 mM	0.7833 mL	3.9167 mL	7.8333 mL
10 mM	0.3917 mL	1.9583 mL	3.9167 mL

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

Biological Activity

Shortsummary	IKK-1/IKK-2 inhibitor,potent and selective
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	THP-1 cells
Preparation method:	The solubility of this compound in DMSO is >70mg/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:	1-100μM for 1 h

	Applications:	In THP-1 cells, only the stimulus-induced phosphorylation of IκB was inhibited by BMS-345541 whereas other signal transduction cascades were unaffected. BMS-345541 inhibited IKK (Iκ B kinase) in cells in the micromolar range and was effective in THP-1 cells at inhibiting the stimulated production of a number of cytokines from THP-1 cells including TNF, IL-1, IL-8, and IL-6.
In Vivo	**Animal experiment**	
	Animal models:	18–22-g female BALB/c mice
	Dosage form:	2mg/kg (1 ml/kg) intravenous bolus or 10 mg/kg (5 ml/kg) peroral gavage.
	Applications:	In BALB/c mice, BMS-345541 dose-dependently inhibited LPS (intraperitoneal)-induced serum TNF production in mice at doses in the 3 to 100 mg/kg range. Approximately 50% inhibition was observed at 10 mg/kg, near complete inhibition of serum TNF was observed at a dose of 100 mg/kg BMS-345541.
	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]. Burke, J.R., et al. BMS-345541 is a highly selective inhibitor of I kappa B kinase that binds at an allosteric site of the enzyme and blocks NF-kappa B-dependent transcription in mice. J Biol Chem, 2003. 278(3): p. 1450-6.

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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