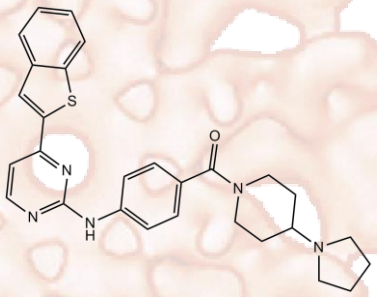
Product Data Sheet

IKK-16 (IKK Inhibitor VII)



Cat. No.:	B1586
CAS No.:	873225-46-8
Formula:	C28H29N5OS
M.Wt:	483.63
Synonyms:	
Target:	Immunology/Inflammation
Pathway:	IκB/IKK
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

≥23.05mg/mL in DMSO

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1mg	5mg	10mg
1 mM	2.0677 mL	10.3385 mL	20.6770 mL
5 mM	0.4135 mL	2.0677 mL	4.1354 mL
10 mM	0.2068 mL	1.0338 mL	2.0677 mL

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

Biological Activity

Shortsummary	Selective IκB kinase inhibitor
IC_{50} & Target	40 nM (IKK-2), 70 nM (IKK complex), 200 nM (IKK-1)

In Vitro

Cell Viability Assay

Cell Line:	HUVEC cells
Preparation method:	The solubility of this compound in DMSO is >10 mM. 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:	0.3-2μM
Applications:	IKK-16 (IKK Inhibitor VII) inhibited IKK2 by the blockade of IκBα degradation

		and suppressed TNFα-stimulated expression of the adhesion molecules E-selectin, ICAM-1, and VCAM-1 in HUVEC cells. Moreover, IKK-16 also showed activity in the IFNγ-induced expression of the MHC molecules β2 microglobulin and HLA-DR, but its potency in these assays is 4- to 10-fold weaker than the adhesion molecules assay.
In Vivo	**Animal experiment**	
	Animal models:	Rat model; thioglycollate-induced peritonitis model in the mouse
	Dosage form:	30 mg/kg, subcutaneous injection (sc) or oral administration for 5 h; or 10 mg/kg, sc
	Applications:	IKK-16 (IKK Inhibitor VII) inhibited TNFα release into plasma upon LPS-challenge in the rat model. Moreover, IKK-16 (IKK Inhibitor VII, 10 mg/kg, sc) resulted in a maximal inhibition of neutrophil extravasation in thioglycollate-induced peritonitis model.
	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

1. Robeson AC, Lindblom KR, et al. "Dimer-specific immunoprecipitation of active caspase-2 identifies TRAF proteins as novel activators." EMBO J. 2018 Jun 6. pii: e97072.PMID:29875129

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References

[1] Waelchli R1, Bollbuck B, Bruns C, Buhl T, Eder J, Feifel R, Hersperger R, Janser P, Revesz L, Zerwes HG, Schlapbach A.Design and preparation of 2-benzamido-pyrimidines as inhibitors of IKK. Bioorg Med Chem Lett. 2006 Jan 1;16(1):108-12. Epub 2005 Oct 19.

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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