

# IKK 16

Catalog No: **tcsc1282**



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

873225-46-8

**Formula:**

$C_{28}H_{29}N_5O_5$

**Pathway:**

Autophagy;NF-κB

**Target:**

LRRK2;IKK

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 27$  mg/mL (55.83 mM)

**Observed Molecular Weight:**

483.63

## Product Description

IKK 16 is a selective IκB kinase (**IKK**) inhibitor for **IKK2**, **IKK complex** and **IKK1** with **IC<sub>50</sub>**s of 40 nM, 70 nM and 200 nM, respectively. IKK16 also inhibits leucine-rich repeat kinase-2 (**LRRK2**) with an **IC<sub>50</sub>** of 50 nM.

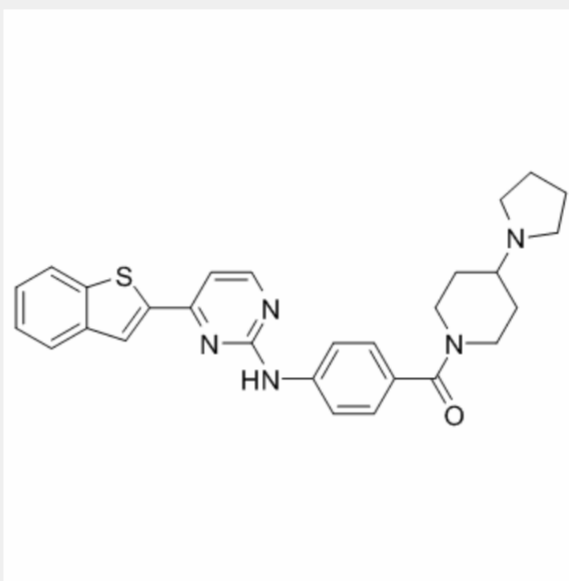
IC50 & Target: IC50: 40 nM (IKK2), 70 nM (IKK complex), 200 nM (IKK1)<sup>[1]</sup>

IC50: 50 nM (LRRK2)<sup>[2]</sup>

**In Vitro:** IKK 16 is a potent inhibitor of IKK2 with IC<sub>50</sub> value of 40 nM<sup>[1]</sup>. IKK 16, a leucine-rich repeat kinase-2 (LRRK2) kinase inhibitor, exhibits in vitro IC<sub>50</sub>s of 50 nM. IKK 16 exhibits sub-micromolar IC<sub>50</sub> concentrations for LRRK2 in vitro, which is lower than what observed for cellular inhibition of Ser935 phosphorylation. IKK 16 (20 μM) can inhibit LRRK2 Ser935 phosphorylation in HEK293 GFP-LRRK2

G2019S cells (GS) or A2016T/G2019S (IRM) cells in vitro.

**In Vivo:** IKK 16 also demonstrates significant in vivo activity in an acute model of cytokine release. Both routes of administration of IKK 16 (30 mg/kg, sc) or orally (30 mg/kg, p.o) at the indicated dose results in a significant inhibition of 86% (sc) and 75% (p.o.). IKK 16(10 mg/kg, sc) is also active in the thioglycollate-induced peritonitis model in the mouse. The maximal inhibition of neutrophil extravasation in this model is about 50%<sup>[1]</sup>. Treatment of septic mice with IKK 16 (1 mg/kg body weight i.v.) results in a significantly increased degree of phosphorylation (P[3]).



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