

# PRODUCT INFORMATION

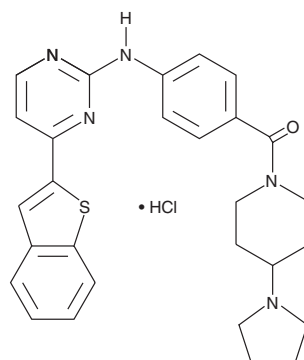


## IKK-16 (hydrochloride)

Item No. 13313

**CAS Registry No.:** 1186195-62-9  
**Formal Name:** [4-[(4-benzo[b]thien-2-yl-2-pyrimidinyl)amino]phenyl]  
[4-(1-pyrrolidinyl)-1-piperidinyl]-  
methanone, monohydrochloride

**Synonyms:** IKK Inhibitor VII  
**MF:** C<sub>28</sub>H<sub>29</sub>N<sub>5</sub>OS • HCl  
**FW:** 520.1  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 209, 263, 309 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

IKK-16 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the IKK-16 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. IKK-16 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of IKK-16 (hydrochloride) in these solvents is approximately 10 and 5 mg/ml, respectively.

IKK-16 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, IKK-16 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. IKK-16 (hydrochloride) has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

IKK-16 is a potent inhibitor of IκB kinases (IKKs), displaying IC<sub>50</sub> values of 200, 40, and 70 nM for IKKα, IKKβ, and IKK complex, respectively, in cell-free assays.<sup>1</sup> It is effective in cells and in animals and has been used to delineate the role of NF-κB signaling in diverse contexts.<sup>2-5</sup> IKK-16 has also been reported to inhibit protein kinase D isoforms and the ATP-binding cassette (ABC) transporter ABCB1.<sup>6,7</sup>

### References

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4. Fallahi-Sichani, M., Moerke, N.J., Niepel, M., *et al. Mol. Syst. Biol.* **11(3)**, 797 (2015).
5. Sordi, R., Chiazza, F., Johnson, F.L., *et al. Mol. Med.* **21(1)**, 563-575 (2015).
6. Tandon, M., Johnson, J., Li, Z., *et al. PLoS One* **8(9)**, e75601 (2013).
7. Ansbrosio, M.R., Shukla, S., Ambudkar, S.V., *et al. PLoS One* **8(4)**, e60334 (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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