

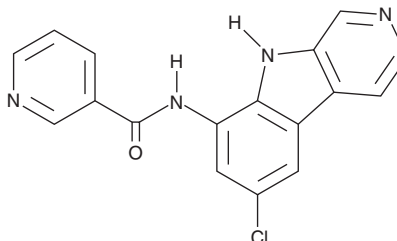
# PRODUCT INFORMATION



## PS-1145

Item No. 14862

**CAS Registry No.:** 431898-65-6  
**Formal Name:** N-(6-chloro-9H-pyrido[3,4-b]indol-8-yl)-3-pyridinecarboxamide  
**Synonym:** IKK Inhibitor X  
**MF:** C<sub>17</sub>H<sub>11</sub>ClN<sub>4</sub>O  
**FW:** 322.8  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 239, 293, 364 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

PS-1145 is supplied as a crystalline solid. A stock solution may be made by dissolving the PS-1145 in the solvent of choice, which should be purged with an inert gas. PS-1145 is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

### Description

PS-1145 is an IκB kinase β (IKKβ) inhibitor (IC<sub>50</sub> = 88 nM).<sup>1</sup> It selectively inhibits IKKβ over a panel of 14 kinases (IC<sub>50</sub>s = >100 nM for all). PS-1145 also inhibits the IKK complex (IC<sub>50</sub> = 100 nM).<sup>2</sup> It inhibits the proliferation of MM.1S, U266, and RPMI-8226 myeloma cells when used at concentrations ranging from 1.5 to 50 μM. PS-1145 inhibits TNF-α-induced activation of NF-κB in MM.1S cells in a concentration-dependent manner. It inhibits RANKL-induced differentiation of RAW 264.7 cells into osteoclasts when used at concentrations of 5 and 10 μM.<sup>3</sup> PS-1145 (10 μM) inhibits RANKL-induced phosphorylation of IκBα, ERK, and JNK in RAW 264.7 cells.

### References

1. Hideshima, T., Chauhan, D., Richardson, P., *et al.* NF-κB as a therapeutic target in multiple myeloma. *J. Biol. Chem.* **277**(19), 16639-16647 (2002).
2. Castro, A.C., Dang, L.C., Soucy, F., *et al.* Novel IKK inhibitors: β-carbolines. *Bioorg. Med. Chem. Lett.* **13**(14), 2419-2422 (2003).
3. Tsunekage, Y., Takeiri, M., Yoshioka, Y., *et al.* *Nasturtium officinale* extract suppresses osteoclastogenesis in RAW 264 cells by inhibiting IκB-kinase β. *Nat. Prod. Commun.* **16**(6), 1-9 (2021).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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