# PRODUCT INFORMATION



# IKK2 Inhibitor VI

Item No. 17276

CAS Registry No.: 354811-10-2

2-[(aminocarbonyl)amino]-5-phenyl-3-Formal Name:

thiophenecarboxamide

Synonym: 5-Phenyl-2-ureidothiophene-3-carboxylic Acid Amide

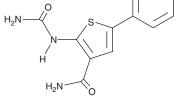
MF:  $C_{12}H_{11}N_3O_2S$ 

261.3 FW: ≥95% **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 212, 233, 314 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**

IKK2 Inhibitor VI is supplied as a crystalline solid. A stock solution may be made by dissolving the IKK2 Inhibitor VI in the solvent of choice, which should be purged with an inert gas. IKK2 Inhibitor VI is soluble in organic solvents such as ethanol and DMSO. The solubility of IKK2 Inhibitor VI in these solvents is approximately 2 and 30 mg/ml, respectively.

IKK2 Inhibitor VI is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, IKK2 Inhibitor VI should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. IKK2 Inhibitor VI has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

Inhibitor of NF-κB kinase 2 (IKK2, also known as IKKβ) acts as part of an IKK complex in the canonical NF-κB pathway, phosphorylating inhibitors of NF-κB (IκBs) to initiate signaling. NF-κB signaling can also occur through a non-canonical, IKK/IkB-independent pathway. IKK2 Inhibitor VI is a potent, cell-permeable, reversible inhibitor of IKK2 ( $IC_{50} = 13 \text{ nM}$ ). It is used to evaluate the role of the canonical, IkB-dependent NF-κB signaling pathway in cellular responses.<sup>2,3</sup>

# References

- 1. Baxter, A., Brough, S., Cooper, A., et al. Hit-to-lead studies: The discovery of potent, orally active, thiophenecarboxamide IKK-2 inhibitors. Bioorg. Med. Chem. Lett. 14(11), 2817-2822 (2004).
- McNamara, L.A., Ganesh, J.A., and Collins, K.L. Latent HIV-1 infection occurs in multiple subsets of hematopoietic progenitor cells and is reversed by NF-kB activation. J. Virol. 86(17), 9337-9350 (2012).
- Puni, V., Matta, H., and Chaudhary, P.M. A computational profiling of changes in gene expression and transcription factors induced by vFLIP K13 in primary effusion lymphoma. PLoS One 7(5), 1-15 (2012).

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

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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# **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM