

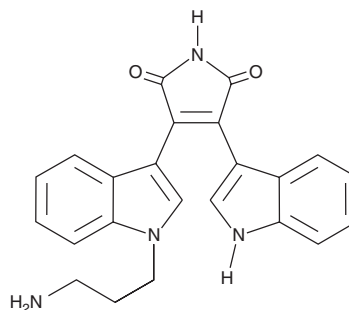
# PRODUCT INFORMATION



## Bisindolylmaleimide III

Item No. 11072

**CAS Registry No.:** 137592-43-9  
**Formal Name:** 3-[1-(3-aminopropyl)-1H-indol-3-yl]-4-(1H-indol-3-yl)-1H-pyrrole-2,5-dione  
**Synonym:** BIM III  
**MF:** C<sub>23</sub>H<sub>20</sub>N<sub>4</sub>O<sub>2</sub>  
**FW:** 384.4  
**Purity:** ≥98%  
**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

Bisindolylmaleimide (BIM) III is supplied as a crystalline solid. A stock solution may be made by dissolving the BIM III in the solvent of choice, which should be purged with an inert gas. BIM III is soluble in organic solvents such as methanol and DMSO. BIM III is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Bisindolylmaleimide III was developed as a protein kinase C (PKC) inhibitor with structural similarity to the nonspecific PKC inhibitor staurosporine.<sup>1,2</sup> At 1  $\mu$ M, bisindolylmaleimide III inhibits 93% of PKC $\alpha$  kinase activity and also inhibits many other protein kinases including, S6K1, MAPKAP-K1, RSK2 and MSK1 with similar potency.<sup>3</sup> Additionally, it inhibits PDK1, an important kinase in the insulin signaling pathway, with an IC<sub>50</sub> value of 3.8  $\mu$ M.

### References

1. Davis, P.D., Hill, C.H., Lawton, G., *et al.* Inhibitors of protein kinase C. 1.1 2,3-bisarylmalimides. *J. Med. Chem.* **35**, 177-184 (1992).
2. Toullec, D., Pianetti, P., Coste, H., *et al.* The bisindolylmaleimide GF 109203X is a potent and selective inhibitor of protein kinase C. *J. Biol. Chem.* **266**(24), 15771-15781 (1991).
3. Davies, S.P., Reddy, H., Caivano, M., *et al.* Specificity and mechanism of action of some commonly used protein kinase inhibitors. *Biochem. J.* **351**, 95-105 (2000).

#### 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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