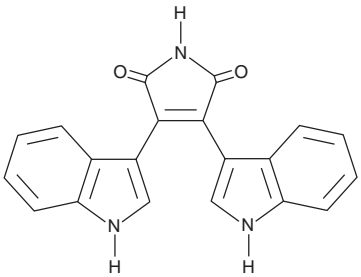
PRODUCT INFORMATION

Bisindolylmaleimide IV

Item No. 13299

CAS Registry No.:	119139-23-0
Formal Name:	3,4-di-1H-indol-3-yl-1H-pyrrole-2,5-dione
Synonyms:	Arcyriarubin A, BIM IV
MF:	$C_{20}H_{13}N_3O_2$
FW:	327.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 276, 373, 461 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

Bisindolylmaleimide IV is supplied as a crystalline solid. A stock solution may be made by dissolving the bisindolylmaleimide IV in the solvent of choice, which should be purged with an inert gas. Bisindolylmaleimide IV is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of Bisindolylmaleimide IV in these solvents is approximately 20 mg/ml.

Bisindolylmaleimide IV is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bisindolylmaleimide IV should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Bisindolylmaleimide IV 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

Bisindolylmaleimide IV (BIM IV) is a cell permeable inhibitor of protein kinase C (PKC) with IC_{50} values reported to range from 0.10 to 0.55 µM.[1-4] BIM IV was designed to be more discriminative than its parent compound, the non-selective PKC inhibitor, staurosporine (Item No. 81590). However, BIM IV also inhibits protein kinase A with IC_{50} values ranging from 2 to 11.8 µM.[1,2]

References

1. Davis, P.D., Hill, C.H., Lawton, G., *et al.* Inhibitors of protein kinase C. 1.1 2,3-bisarylmaleimides. *J. Med. Chem.* **35(1)**, 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. Fabre, S. and Prudhomme, M. Protein kinase C inhibitors; structure-activity relationships in K252c-related compounds. *Bioorg. Med. Chem.* **1(3)**, 193-196 (1993).
4. Lazareno, S., Popham, A., and Birdsall, N.J.M. Muscarinic interactions of bisindolylmaleimide analogues. *Eur. J. Pharmacol.* **360(2-3)**, 281-284 (1998).

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