
Product Data Sheet

Product Name: Bisindolylmaleimide V

Cat. No.: GC17239

Chemical Properties

Cas. No. 113963-68-1

Chemical Name 3,4-di(1H-indol-3-yl)-1-methyl-1H-pyrrole-2,5-dione

SMILES CN1C(C(C2=CNC3=CC=CC=C23)=C(C1=O)C4=CNC5=CC=CC=C45)=OFormula $C_{21}H_{15}N_3O_2$ M.Wt 341.36Solubility DMF: 20 mg/ml, DMF:PBS (pH 7.2) (1:9): 0.1 mg/ml, DMSO: 20 mg/ml, Ethanol: 20 mg/ml
Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available sizes: ship with RT, or blue ice upon request.

Structure **Background**

Bisindolylmaleimide V (BIM V, Ro 31-6045) is a negative control for protein kinase C (PKC)-inhibitory activity with Kd value of 100 nM [1]. Ro 31-6045 also inhibited S6K activity with IC50 value of 8 nM [4].

Protein kinase C plays an important role in the transduction of signals from a variety of mediators across the cell membrane. PKC regulates cell proliferation, secretion, and gene expression. Inhibition of PKC may provide therapy for diseases such as rheumatoid arthritis, cancer and AIDS [2][3].

Bisindolylmaleimide V is the inactive analogue of the protein kinase C inhibitor Ro 31-8220. Bisindolylmaleimide IV was very weak and inhibited [3H] N-methyl scopolamine binding only at the highest concentration used [1]. Ro 31-6045 also inhibited mitogen-stimulated protein kinase p70s6k/p85s6k (S6K) activity. In fibroblasts, Ro 31-6045

Caution: Product has not been fully validated for medical applications. For research use only.

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References:

Lazareno S, Popham A, Birdsall NJ. Muscarinic interactions of bisindolylmaleimide analogues. Eur J Pharmacol. 1998 Nov 6;360(2-3):281-4.

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. 1991 Aug 25;266(24):15771-81.

Davis PD, Hill CH, Lawton G, et al. Inhibitors of protein kinase C. 1. 2,3-Bisarylmaleimides. J Med Chem. 1992 Jan;35(1):177-84.

Marmy-Conus N, Hannan KM, Pearson RB. Ro 31-6045, the inactive analogue of the protein kinase C inhibitor Ro 31-8220, blocks in vivo activation of p70(s6k)/p85(s6k): implications for the analysis of S6K signalling. FEBS Lett. 2002 May 22;519(1-3):135-40.

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