

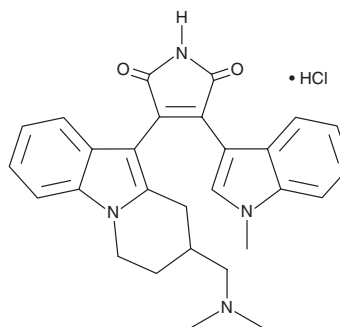
PRODUCT INFORMATION



Bisindolymaleimide XI (hydrochloride)

Item No. 11073

CAS Registry No.: 145333-02-4
Formal Name: 3-[8-[(dimethylamino)methyl]-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl]-4-(1-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione, monohydrochloride
Synonyms: BIM XI, Ro 31-0432
MF: $C_{28}H_{28}N_4O_2 \cdot HCl$
FW: 489.0
Purity: $\geq 98\%$
Supplied as: A crystalline solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

Bisindolymaleimide XI (BIM XI) (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the BIM XI (hydrochloride) in the solvent of choice. BIM XI (hydrochloride) is soluble in organic solvents such as DMSO and methanol, which should be purged with an inert gas.

Description

BIM XI is a selective, cell-permeable protein kinase C (PKC) inhibitor that displays 10-fold greater selectivity for PKC α (IC_{50} = 9 nM) and 4-fold greater selectivity for PKC β (IC_{50} = 28 nM) over Ca^{2+} -independent PKC ϵ (IC_{50} = 108 nM).¹ Inhibition of PKC α by BIM XI and other similar PKC inhibitors has been associated with enhanced cardiac contractility and protection from heart failure.² BIM XI prevents T-cell activation and proliferation (with IC_{50} s ranging from 30-150 nM) associated with chronic inflammatory responses *in vivo*.³

References

1. Wilkinson, S.E., Parker, P.J., and Nixon, J.S. Isoenzyme specificity of bisindolymaleimides, selective inhibitors of protein kinase C. *Biochem. J.* **294**(Pt 2), 335-337 (1993).
2. Liu, Q., Chen, X., MacDonnell, S.M., *et al.* PKC α , but not PKC β or PKC ϵ , regulates contractility and heart failure susceptibility: Implications for ruboxistaurin as a novel therapeutic approach. *Circ. Res.* **105**(2), 194-200 (2009).
3. Birchall, A.M., Bishop, J., Bradshaw, D., *et al.* Ro 32-0432, a selective and orally active inhibitor of protein kinase C prevents T-cell activation. *J. Pharmacol. Exp. Ther.* **268**(2), 922-929 (1994).

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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