Catalog # 10-1563

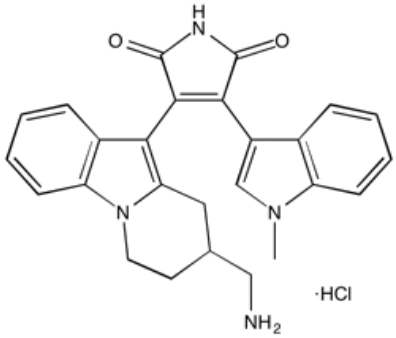
Ro 31-8425

CAS# 145317-11-9

Bisindolylmaleimide X; BIM X

3-[8-(Aminomethyl)-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl]-4-(1-methylindol-3-yl)pyrrol-2,5-dione hydrochloride

Lot # X106555



Selective, reversible, ATP-competitive inhibitor of protein kinase C. Inhibits PKCα, β1, β2, γ and ε, IC_{50}= 8, 8, 14,13 and 39 nM respectively.[1] Extremely useful tool for probing PKC-dependent physiology[2] or signaling pathways[3]. Increases MSC adhesion to an ICAM-1 coated substrate *in vitro* and enables targeted delivery of systematically administered MSCs to inflamed sites *in vivo* in a CD11a-dependent manner.[4] Cell permeable.

1) Wilkinson *et al*. (1993), *Isoenzyme specificity of bisindolylmaleimides, selective inhibitors of protein kinase C*; Biochem. J., **294** 335

2) Niu *et al*. (2011), *PKCε regulates contraction-stimulated GLUT4 traffic in skeletal muscle cells*; J. Cell Physiol., **226** 173

3) Jimenez-Lopez *et al*. (2005), *Protein kinase C signaling as a survival pathway against CYP2E1-derived oxidative stress and toxicity in HepG2 cells*; J. Pharmacol. Exp. Ther., **312** 998

4) Levy *et al*. (2015), *A small-molecule screen for enhanced homing of systemically infused cells*; Cell Rep., **10** 1261

PHYSICAL DATA

Molecular Weight:	460.96
Molecular Formula:	$C_{26}H_{24}N_4O_2 \cdot HCl$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 10 mg/ml)
Physical Description:	Red solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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