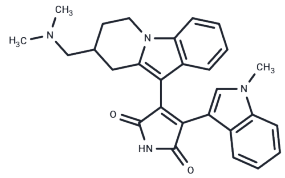
Data Sheet (Cat.No.T36228)

TargetMol

Bisindolylmaleimide XI hydrochloride

Chemical Properties



CAS No. : 145333-02-4

Formula: C28H29ClN4O2

Molecular Weight: 489.01

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Bisindolylmaleimide XI hydrochloride (Ro 32-0432) is an orally active pan-PKC inhibitor that inhibits PKCα, PKCβI, PKCβII, and PKCγ (IC50 = 9/28/31/37/108 nM).
Targets(IC50)	PKC
In vitro	Bisindolylmaleimide XI hydrochloride (Ro 32-0432) significantly inhibits IL-2 secretion, IL-2 receptor expression, and proliferative capacity in Homo sapiens peripheral T cells. These T cells were activated by phorbol ester combined with phytohemagglutinin or anti-CD3 antibody stimulation. However, this compound shows no significant inhibitory effect on IL-2-induced proliferation in T cells that have already been activated and express IL-2 receptors. For the influenza peptide antigen HA 307-319-specific Homo sapiens T cell clone (HA27), the proliferative response occurring after co-culture with antigen-pulsed autologous antigen-presenting cells can also be effectively suppressed by Bisindolylmaleimide XI hydrochloride [2]. Bisindolylmaleimide XI hydrochloride (1 μM) intervention in retinal progenitor cells (RPCs) reduces the apoptosis ratio by 21% through inhibition of PKC activity [3].
In vivo	Oral administration of Bisindolylmaleimide XI hydrochloride significantly inhibits phorbol ester-induced subsequent edema reactions in rats. Bisindolylmaleimide XI hydrochloride can suppress various T cell-mediated physiological immune responses, with typical examples including host rejection reaction against grafts and secondary paw swelling symptoms observed in adjuvant-induced arthritis models [2].

Solubility Information

Solubility	DMSO: 4 mg/mL (8.18 mM),Sonication is recommended. Methanol: Soluble,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0449 mL	10.2247 mL	20.4495 mL
5 mM	0.409 mL	2.0449 mL	4.0899 mL
10 mM	0.2045 mL	1.0225 mL	2.0449 mL
50 mM	0.0409 mL	0.2045 mL	0.409 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

S E Wilkinson, et al. Isoenzyme specificity of bisindolylmaleimides, selective inhibitors of protein kinase C. Biochem J. 1993 Sep 1;294 (Pt 2)(Pt 2):335-7.

A M Birchall, et al. Ro 32-0432, a selective and orally active inhibitor of protein kinase C prevents T-cell activation. J Pharmacol Exp Ther. 1994 Feb;268(2):922-9.

Roman Kholodenko, et al. Anti-apoptotic effect of retinoic acid on retinal progenitor cells mediated by a protein kinase A-dependent mechanism. Cell Res. 2007 Feb;17(2):151-62.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481