

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com



DATASHEET

LY 333531 hydrochloride

Product overview

Name	LY 333531 hydrochloride
Cat No	HB0393
Alternative names	Ruboxistaurin
Description	Potent, selective, competitive PKC inhibitor

Biological Data

Biological description	Potent, selective and competitive protein kinase C (PKC) inhibitor. Selective for PKC β I and PKC β II (IC_{50} values are 4.7 and 5.9 nM respectively) over PKC α by 76- and 61- fold respectively. Shows antinociceptive actions against and improves vascular function in diabetes.
------------------------	--

Solubility & Handling

Storage instructions	-20°C
Solubility overview	Soluble in DMSO (20mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	(9 <i>S</i>)-9-[(Dimethylamino)methyl]-6,7,10,11-tetrahydro-9 <i>H</i> ,18 <i>H</i> -5,21:12,17-dimethenodibenz <i>o</i> [<i>e,k</i>]pyrrolo[3,4- <i>h</i>][1,4,13]oxadiazacyclohexadecin <i>e</i> -18,20(19 <i>H</i>)-dione hydrochloride
Molecular Weight	505.01
Chemical structure	The chemical structure shows a complex polycyclic system. It features a central pyrrole ring fused with a benzene ring, which is further fused with a 1,4-dihydro-2H-pyridine ring. This is part of a larger molecule where the pyrrole ring is substituted with a dimethylaminomethyl group (-NMe2CH2-) at the 9-position. The entire molecule is labeled with HCl, indicating it is a hydrochloride salt.
Molecular Formula	C ₂₈ H ₂₈ N ₄ O ₃ ·HCl
CAS Number	169939-93-9
PubChem identifier	9870785
SMILES	O=C(C(C4=CN(CCO[C@H](CN(C)C)CC6)C5=C4C=CC=C5)=C1C2=CN6C3=CC=CC=C23)NC1=O.CI
InChiKey	NYQIEYDJYFVLPO-FERBBOLQSA-N

References

(S)-13-[(dimethylamino)methyl]-10,11,14,15-tetrahydro-4,9:16, 21-dimetheno-1*H*, 13*H*-dibenzo[*e,k*]pyrrolo[3,4-*h*][1,4,13]oxadiazacyclohexadecene-1,3(2*H*)-d ione (LY333531) and related analogues: isozyme selective inhibitors of protein kinase C beta.

Jirousek MR *et al* (1996) J Med Chem 39(14)

PubMedID

8709095

Protein kinase C β selective inhibitor LY333531 attenuates diabetic hyperalgesia through ameliorating cGMP level of dorsal root ganglion neurons.

Kim H *et al* (2003) Diabetes 52(8)

PubMedID

12882929

Effects of the protein kinase C beta inhibitor LY333531 on neural and vascular function in rats with streptozotocin-induced diabetes.

Cotter MA *et al* (2002) Clin Sci (Lond) 103(3)

PubMedID

12193157
