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DATASHEET

(-)-[3R,4S]-Chromanol 293B

Product overview

Name	(-)-[3R,4S]-Chromanol 293B
Cat No	HB1076
Biological action	Inhibitor
Purity	>98%
Description	Selective delayed rectifier K^+ current inhibitor

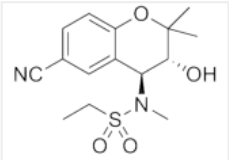
Biological Data

Biological description	Selective delayed rectifier K^+ current (I_{Ks}) inhibitor (IC_{50} = 1.36 µM). Enantiomer of Chromanol 293B; more potent than the (+)-(3S,4R) enantiomer (IC_{50} = 9.6 µM). Shows an open channel time-dependent block.

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in ethanol (100mM, gentle warming) or DMSO (100mM)
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	*N*-[(3*R*,4*S*)-6-Cyano-3,4-dihydro-3-hydroxy-2,2-dimethyl-2*H*-1-benzopyran-4-yl]-*N*-methylethanesulfonamide
Molecular Weight	324.39
Chemical structure	
Molecular Formula	$C_{15}H_{20}N_2O_4S$
CAS Number	163163-24-4
PubChem identifier	121846
SMILES	CCS(=O)(=O)N(C)[C@@H]1[C@@H](O)C(C)(C)OC2=C1C=C(C=C2)C#N
InChi	InChI=1S/C15H20N2O4S/c1-5-22(19,20)17(4)13-11-8-10(9-16)6-7-12(11)21-15(2,3)14(13)18/h6-8,13-14,18H,5H2,1-4H3/t13-,14+/m0/s1
InChiKey	HVSJHHXUORMCGK-UONOGXRCSA-N

References

Stereoselective interactions of the enantiomers of chromanol 293B with human voltage-gated potassium channels.

Yang IC *et al* (2000) J Pharmacol Exp Ther 294(3)

PubMedID 10945846

A kinetic study on the stereospecific inhibition of KCNQ1 and I(Ks) by the chromanol 293B.

Seebohm G *et al* (2001) Br J Pharmacol 134(8)
PubMedID 11739240

Molecular impact of MinK on the enantiospecific block of I(Ks) by chromanols.

Lerche C *et al* (2000) Br J Pharmacol 131(8)
PubMedID 11139424