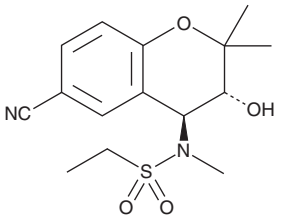
PRODUCT INFORMATION

Chromanol 293B

Item No. 19993

CAS Registry No.: 163163-23-3
Formal Name: *rel*-N-[(3R,4S)-6-cyano-3,4-dihydro-3-hydroxy-2,2-dimethyl-2H-1-benzopyran-4-yl]-N-methyl-ethanesulfonamide
Synonym: Chromanol 239B
MF: $C_{15}H_{20}N_2O_4S$
FW: 324.4
Purity: ≥98%
UV/Vis.: λ_{max}: 252 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Chromanol 293B is supplied as a crystalline solid. A stock solution may be made by dissolving the chromanol 293B in the solvent of choice, which should be purged with an inert gas. Chromanol 293B is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of chromanol 293B in ethanol is approximately 2 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

Chromanol 293B is a blocker of slowly activating delayed rectifier K^+ current (I_{Ks}) with an IC_{50} value of 6.89 µM in *Xenopus* oocytes expressing rat I_{Ks} channels.[1] It is selective, having no activity at rat $K_v1.1$ or $K_{ir}2.1$ channels at a concentration of 30 µM. Chromanol 293B increases the rate and extent of I_{Ks} in guinea pig ventricular cells in a dose-dependent manner.[2] It also inhibits cystic fibrosis transmembrane conductance regulator (CTFR) Cl^- currents (I_{CTFR}) with an IC_{50} value of 19 µM in *Xenopus* oocytes expressing human CTFR.[3]

References

1. Suessbrich, H., Bleich, M., Ecke, D., *et al.* Specific blockade of slowly activating I_{sK} channels by chromanols -- Impact on the role of I_{sK} channels in epithelia. *FEBS Lett.* **396(2-3)**, 271-275 (1996).
2. Fujisawa, S., K., O. and Iijima, T. Time-dependent block of the slowly activating delayed rectifier K^+ current by chromanol 293B in guinea-pig ventricular cells. *Br. J. Pharmacol.* **129(5)**, 1007-1013 (2000).
3. Bachmann, A., Quast, U., and Russ, U. Chromanol 293B, a blocker of the slow delayed rectifier K^+ current (I_{Ks}), inhibits the CFTR Cl^- current. *Naunyn Schmiedebergs Arch. Pharmacol.* **363(6)**, 590-596 (2001).

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