

Certificate of Analysis

Print Date: Dec 12th 2017

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Product Name: Chromanol 293B Catalog No.: 1412 Batch No.: 1

CAS Number: 163163-23-3

IUPAC Name: trans-N-[6-Cyano-3,4-dihydro-3-hydroxy-2,2-dimethyl-2*H*-1-benzopyran-4-yl]-*N*-methyl-ethanesulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{15}H_{20}N_2O_4S$

Batch Molecular Weight: 324.39

Physical Appearance: White crystalline solid **Solubility:** ethanol to 20 mM

DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

NC Et S N Me (and enantiomer)

2. ANALYTICAL DATA

TLC: $R_f = 0.7$ (Dichloromethane:Methanol [9:1])

Melting Point:

Between 213 - 216°C

HPLC:

Shows 99.5% purity

TH NMR:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 55.54 6.21 8.64 Found 55.49 6.14 8.57



Product Information

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Description:

Blocker of the slow delayed rectifier K⁺ current (I_{Ks}) (IC_{50} = 1-10 μ M). Also blocks the CFTR chloride current (I_{CFTR}) (IC_{50} = 19 μ M). Enantiomer also available.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₅H₂₀N₂O₄S Batch Molecular Weight: 324.39

Physical Appearance: White crystalline solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at RT

Solubility & Usage Info:

ethanol to 20 mM DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Bachmann *et al* (2001) Chromanol 293B, a blocker of the slow delayed rectifier K⁺ current (I_{KS}), inhibits the CFTR Cl⁻ current. Naunyn Schmiedebergs Arch.Pharmacol. *363* 590. PMID: 11414653.

Sun et al (2001) Chromanol 293B inhibits slowly activating delayed rectifier and transient outward currents in canine left ventricular myocytes. J.Cardiovasc.Electrophysiol. **12** 472. PMID: 11332571.

Fujisawa et al (2000) Time-dependent block of the slowly activating delayed rectifier K+ current by chromanol 293B in guinea-pig ventricular cells. Br.J.Pharmacol. 129 1007. PMID: 10696102.