

**Product Name:** Chroman 1

**Catalog No.:** 7163

**Batch No.:** 1

**IUPAC Name:** (3*S*)-*N*-[2-[2-(Dimethylamino)ethoxy]-4-(1*H*-pyrazol-4-yl)phenyl]-3,4-dihydro-6-methoxy-2*H*-1-benzopyran-3-carboxamide dihydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>24</sub>H<sub>28</sub>N<sub>4</sub>O<sub>4</sub>·2HCl·1¼H<sub>2</sub>O

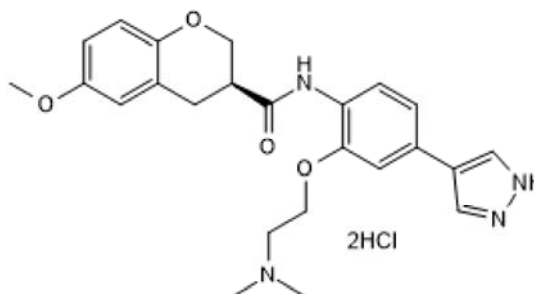
**Batch Molecular Weight:** 531.95

**Physical Appearance:** Off-white solid

**Solubility:** DMSO to 100 mM  
water to 5 mM

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.2% purity

**Chiral HPLC:** Shows 98.8% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	54.19	6.16	10.53	13.33
Found	54.81	6.44	10.61	11.8

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**Description:**

Chroman 1 is a highly potent and selective ROCK2 (Rho-kinase) inhibitor (IC<sub>50</sub> values are 1 and 52 pM at ROCK2 and ROCK1, respectively). Chroman 1 exhibits >2000-fold selectivity for ROCK2 over a range of related kinases including MRCK, PKA, and AKT1 (IC<sub>50</sub> values are 150, >20000, and >20000 nM, respectively). Chroman 1 promotes survival of pluripotent stem cells (PSCs) in culture when used in combination with Emricasan (Cat. No. 7310), Polyamine Supplement x1000 (lyophilized) (Cat. No. 7739), and Please see product specific page on [www.tocris.com](http://www.tocris.com) for full description.

**Physical and Chemical Properties:**

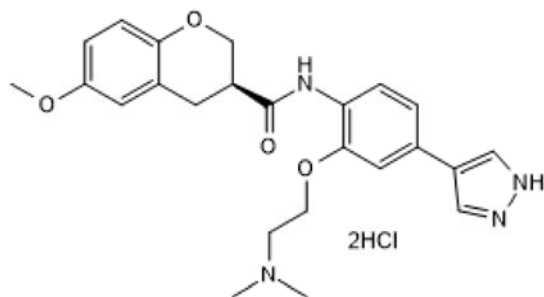
Batch Molecular Formula: C<sub>24</sub>H<sub>28</sub>N<sub>4</sub>O<sub>4</sub>·2HCl·1¼H<sub>2</sub>O

Batch Molecular Weight: 531.95

Physical Appearance: Off-white solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Chen et al (2021)** A versatile polypharmacology platform promotes cytoprotection and viability of human pluripotent and differentiated cells. *Nat.Methods* **18** 528. PMID: 33941937.

**Chen et al (2011)** Asymmetric synthesis of potent chroman-based Rho kinase (ROCK-II) inhibitors. *Med.Chem.Commun.* **2** 73.

**Storage:** Store at -20°C

**Solubility & Usage Info:**

DMSO to 100 mM

water to 5 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.

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