

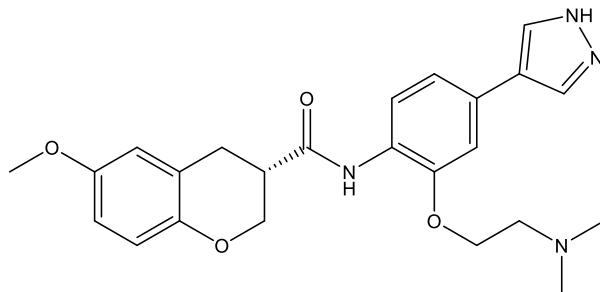
Catalog # 10-4912

Chroman 1

CAS# 1273579-40-0

(3S)-N-[2,[2-(Dimethylamino)ethoxy]-4-(1H-pyrazol-4-yl)phenyl]-6-methoxy-3,4-dihydro-2H-chromen-3-carboxamide

Lot # FBA8069



Chroman 1 is an extremely potent inhibitor of Rho kinase II (ROCK-II)^{1,2} – it displayed greater selectivity and potency compared to Y-27632 (IC₅₀'s: ROCK I = 52 pM/ROCK II = 1 pM; Y-27632 IC₅₀'s: ROCK I = 71 nM/ROCK II = 46 nM)³. Chroman 1, used in conjunction with trans-ISRIB (Cat# 10-1539), Emricasan (Cat# 10-4280), and polyamines (CEPT cocktail), promotes cytoprotective cell survival in human pluripotent stem cells (hPSCs) and was found to be superior to Y-27632.³ Chroman 1 is an important new tool in the generation and maintenance of stem cells.

- 1) Chen *et al.* (2011), *Asymmetric synthesis of potent chroman-based Rho kinase (ROCK-II) inhibitors*; Med. Chem. Commun., **2** 73
- 2) Chen *et al.* (2008), *Chroman-3-amides as potent Rho kinase inhibitors*; Bioorg. Med. Chem. Lett., **18** 6406
- 3) Chen *et al.* (2021), *A Versatile Polypharmacology Platform Promotes Cytoprotection and Viability of Human Pluripotent and Differentiated Cells*; Nat. Methods, **18** 528

PHYSICAL DATA

Molecular Weight:	436.51
Molecular Formula:	C ₂₄ H ₂₈ N ₄ O ₄
Purity:	99% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (at least 50 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.