

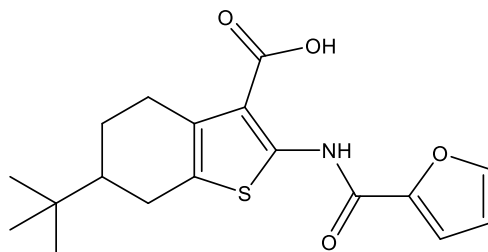
Catalog # 10-1600

CaCCInh-A01

CAS# 407587-33-1

6-(1,1-Dimethylethyl)-2-[(2-furanylcarbonyl)amino]-4,5,6,7-tetrahydro-benzo[b]thiophene-3-carboxylic acid

Lot # S103105



A potent inhibitor of TMEM16A ($IC_{50} = 2.1 \mu M$), a calcium-activated chloride channel.¹ Blockade of TMEM16A with CaCCInh-A01 protects against renal fibrosis², reduces blood brain barrier permeability, attenuates brain infarct size and neurological deficits after ischemic stroke³, and induces apoptosis and cell cycle arrest in various epithelium-originated cancer cells⁴.

- 1) Namkung *et al.* (2011) *TMEM16A inhibitors reveal TMEM16A as a minor component of calcium-activated chloride channel conductance in airway and intestinal epithelial cells*; J. Biol. Chem. **286** 2365
- 2) Li *et al.* (2022) *Blockade of TMEM16A protects against renal fibrosis by reducing intracellular Cl⁻ concentration*; Br. J. Pharmacol. **179** 3043
- 3) Liu *et al.* (2019) *TMEM16A Inhibition Preserves Blood-Brain Barrier Integrity After Ischemic Stroke*; Front. Cell Neurosci. **13** 360
- 4) Guan *et al.* (2016) *Inhibition of calcium-activated chloride channel ANO1 suppresses proliferation and induces apoptosis of epithelium originated cancer cells*; Oncotarget **7** 78619

PHYSICAL DATA

Molecular Weight:	347.43
Molecular Formula:	C ₁₈ H ₂₁ NO ₄ S
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (40 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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