

Pico145

Chemical Properties

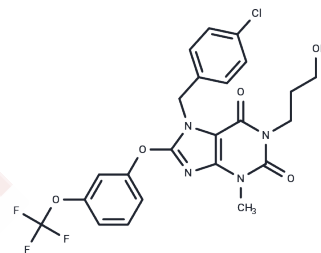
CAS No. : 1628287-16-0

Formula: C₂₃H₂₀ClF₃N₄O₅

Molecular Weight: 524.88

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Pico145 (HC-608) is a remarkable inhibitor of TRPC1/4/5 channels, specifically inhibiting ()-englerin A-activated TRPC4/TRPC5 channels with IC ₅₀ s of 0.349 and 1.3 nM in cells, while showing no effect on TRPC3, TRPC6, TRPV1, TRPV4, TRPA1, TRPM2, or TRPM8.
Targets(IC ₅₀)	TRP/TRPV Channel
In vitro	Pico145 is a remarkable small-molecule inhibitor of TRPC1/4/5 channels. Pico145 displays no effect on TRPC3, TRPC6, TRPV1, TRPV4, TRPA1, TRPM2, TRPM8. Pico145 inhibits (?) -englerin A-activated TRPC4/TRPC5 channels (IC ₅₀ s: 0.349 and 1.3 nM in cells). Pico145 also inhibits human TRPC4-TRPC1 and TRPC5-TRPC1 concatemers expressed in HEK 293 Tet+ cells (IC ₅₀ , 0.03 nM, and 0.2 nM, respectively). Pico145 effectively inhibits RPC4-TRPC1 channels activated by sphingosine 1-phosphate (S1P) and suppresses S1P-evoked Ca ²⁺ entry through TRPC4-TRPC1 channels (IC ₅₀ : 0.011 nM). The potency of Pico145 can be reduced by increased (?) -englerin A concentration. Pico145 also sensitizes EA-sensitive cancer cell line (Hs578T cells) (IC ₅₀ , 0.11 nM). Pico145 (100 nM) lacks effect on store-operated Ca ²⁺ entry and histamine-evoked Ca ²⁺ entry into endothelial cells[1].

Solubility Information

Solubility	DMSO: 99 mg/mL (188.61 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9052 mL	9.526 mL	19.052 mL
5 mM	0.381 mL	1.9052 mL	3.8104 mL
10 mM	0.1905 mL	0.9526 mL	1.9052 mL
50 mM	0.0381 mL	0.1905 mL	0.381 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Rubaiy HN, et al. Picomolar, selective, and subtype-specific small-molecule inhibition of TRPC1/4/5 channels. J Biol Chem. 2017 May 19;292(20):8158-8173.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 36 Washington Street, Wellesley Hills, MA 02481