Dooku1

Cat. No.: HY-126010

CAS No.: 2253744-54-4

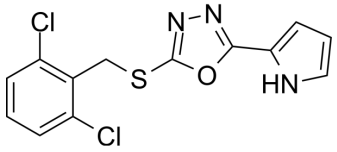
Molecular Formula: $C_{13}H_9Cl_2N_3OS$

Molecular Weight: 326.2

Target: Piezo Channel

Pathway: Membrane Transporter/Ion Channel

Storage: -20°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (306.56 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.0656 mL	15.3280 mL	30.6560 mL
	5 mM	0.6131 mL	3.0656 mL	6.1312 mL
	10 mM	0.3066 mL	1.5328 mL	3.0656 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (6.38 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Dooku1, a competitive antagonist of Yoda1 (HY-18723), is a selective antagonist of the endogenous Piezo1 channel. Dooku1 inhibited 2 μM Yoda1-induced Ca^{2+}-entry with IC_{50} values of 1.3 μM (in HEK 293 cells) and 1.5 μM (in HUVECs). Dooku1 inhibits Yoda1-induced relaxation of aorta[1].

CUSTOMER VALIDATION

- Neuron. 2022 Nov 8;S0896-6273(22)00954-0.
- Applied Materials Today. 27, June 2022, 101465.
- Am J Pathol. 2023 Jun 14;S0002-9440(23)00208-0.

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REFERENCES

[1]. Evans EL, et al. Yoda1 analogue (Dooku1) which antagonizes Yoda1-evoked activation of Piezo1 and aortic relaxation. Br J Pharmacol. 2018 May;175(10):1744-1759.

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