Product Data Sheet

Product Name: Piezo1 agonist 2 hydrochloride
Cat. No.: GC81852

Chemical Properties

Cas. No.			
Formula	$C_{19}H_{18}ClNO_5S$	M.Wt	407.87
Solubility	DMSO: 50 mg/mL (122.59 mM; Need ultrasonic)	Storage	Store at 4°C, sealed storage, away from moisture
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Piezo1 agonist 2 hydrochloride is a blood-brain barrier-permeable Piezo1 agonist and Jedi2

conjugate that utilizes LAT1. Piezo1 agonist 2 hydrochloride releases Jedi2 in mice. Piezo1 agonist 2 hydrochloride can be used for the research of neurodegenerative diseases [1].

In Vivo, Piezo1 agonist 2 (PD2) (15 μmol/kg; i.p.; single bolus injection) hydrochloride enhances the brain targeting of its active metabolite Jedi2 in mice[1].

In Vitro, The half-life of Piezo1 agonist 2 (PD2) (5 h) hydrochloride is 33 min in mouse serum and 71 min in mouse liver S9[1]. Piezo1 agonist 2 (5-200 μM; 30 min) hydrochloride is taken up in a concentration-dependent manner by mouse microglial BV2 cells, with a Km value of 148 μM[1]. Piezo1 agonist 2 (1-100 μM; 48 h) hydrochloride does not significantly reduce the viability of mouse microglial BV2 cells at concentrations up to 100 μM, with cell viability remaining above 92 % of that in the untreated control group[1].

References:
[1]. Anamea L, et al. Brain-targeted Jedi1 and Jedi2 derivatives as potent enhancers of Piezo1 ion channel activity. Eur J Med Chem. 2026;302(Pt 2):118359.