

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

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

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 $\mu\text{mol/kg}$; 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 K_m 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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA