

Product Data Sheet

Product Name: PBT434 mesylate

Cat. No.: GC70496

Chemical Properties

Cas. No. 2387898-69-1

Formula $C_{13}H_{17}Cl_2N_3O_5S$ M.Wt 398.26

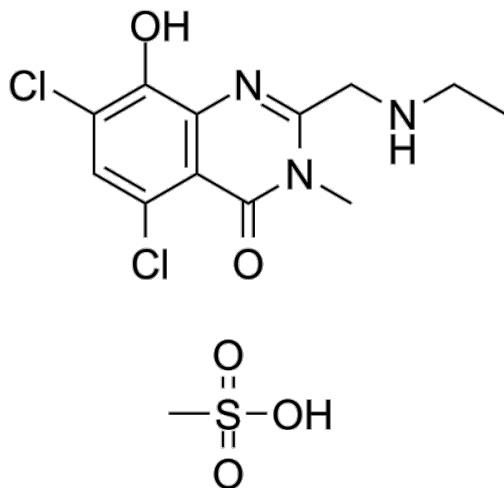
Solubility DMSO : 100 mg/mL (251.09 mM);
Need ultrasonic; Hygroscopic DMSO
has a significant impact on the
solubility of product, please use
newly opened DMSO)

Storage 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

PBT434 methanesulfonate is a potent, orally active and cross the blood-brain barrier α -synuclein aggregation inhibitor. PBT434 methanesulfonate can be used as a iron chelator and modulates transcellular iron trafficking. PBT434 methanesulfonate inhibits iron-mediated redox activity and iron-mediated aggregation of α -synuclein. PBT434 methanesulfonate prevents the loss of substantia nigra

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

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pars compacta neurons (SNpc). PBT434 methanesulfonate has the potential for the research of Parkinson's disease (PD).

PBT434 methanesulfonate (0-20 μ M; 3 h) significantly inhibits H_2O_2 production by iron and significantly reduces the rate of Fe-mediated aggregation of α -synuclein^[1].

PBT434 methanesulfonate (0-100 μ M; 24 h) shows no cytotoxic effects on brain microvascular endothelial cells^[2].

PBT434 methanesulfonate (20 μ M; 24 h) increases the expression of total TfR, Cp protein level in hBMVEC^[2].

PBT434 methanesulfonate (30 mg/kg; p.o.; daily for 21 days) significantly preserved neuron numbers in the 6-OHDA intoxication model and shows significantly fewer rotations in the L-DOPA model, significantly reducing SNpc neuronal loss in the MPTP model^[1].

References:

- [1]. Finkelstein DI, et al. The novel compound PBT434 prevents iron mediated neurodegeneration and alpha-synuclein toxicity in multiple models of Parkinson's disease. *Acta Neuropathol Commun*. 2017 Jun 28;5(1):53.
- [2]. Bailey DK, Clark W, Kosman DJ. The iron chelator, PBT434, modulates transcellular iron trafficking in brain microvascular endothelial cells. *PLoS One*. 2021 Jul 26;16(7):e0254794.

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