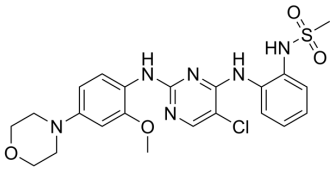
CZC-54252

Cat. No.:	HY-B0792
CAS No.:	1191911-27-9
Molecular Formula:	$C_{22}H_{25}ClN_6O_4S$
Molecular Weight:	504.99
Target:	LRRK2
Pathway:	Autophagy
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (198.02 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.9802 mL	9.9012 mL	19.8024 mL
5 mM	0.3960 mL	1.9802 mL	3.9605 mL
10 mM	0.1980 mL	0.9901 mL	1.9802 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (4.95 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CZC-54252 is a potent and selective LRRK2 inhibitor with IC_{50}s of 1.28 nM and 1.85 nM for wild-type and G2019S LRRK2, respectively. CZC-54252 attenuates G2019S LRRK2-induced human neuronal injury with an EC_{50} of ~1 nM. CZC-54252 has a neuroprotective activity[1].

IC_{50} & Target

IC50: 1.28 nM (Wild-type LRRK2) and 1.85 nM (G2019S LRRK2)[1]

In Vitro

CZC-54252 inhibits the activity of recombinant human wild-type LRRK2 with an IC_{50} ranging from ⊠1 to ⊠5 nM. In addition, they are screened against a kinase panel of 185 kinases and exhibited good selectivity[1].

G2019S LRRK2-induced human neuronal injury is attenuated by CZC-54252 with an EC_{50} of ~1 nM and fully reversed to wild-type levels by CZC-54252 at concentration of 1.6 nM[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ramsden N, et al. Chemoproteomics-based design of potent LRRK2-selective lead compounds that attenuate Parkinson's disease-related toxicity in human neurons. ACS Chem Biol. 2011 Oct 21;6(10):1021-8.

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