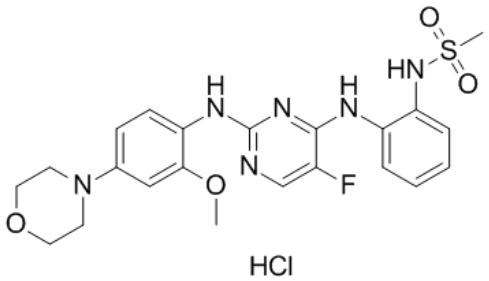
Product Data Sheet

Product Name: CZC-25146 hydrochloride
Cat. No.: GC35792

Chemical Properties

Cas. No.	1330003-04-7		
SMILES	CS(=O)(NC1=CC=CC=C1NC2=NC(NC3=CC=C(N4CCOCC4)C=C3OC)=NC=C2F)=O.Cl		
Formula	$C_{22}H_{26}ClFN_6O_4S$	M.Wt	525
Solubility	Soluble in DMSO	Storage	Store at -20°C
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

CZC-25146 Hcl is a potent, selective and metabolically stable LRRK2 inhibitor with IC50 of 4.76 nM/6.87 nM for wild type LRRK2 and G2019S LRRK2 respectively.IC50 value: 4.76 nM/6.87 nM(wild type/G2019S LRRK2) [1]Target: LRRK2 CZC-25146displayed a very clean profile, it inhibited only five kinases(PLK4, GAK, TNK1, CAMKK2 and PIP4K2C) with high potency, none of which have been classified as predictors of genotoxicity or hematopoietic toxicity. CZC-25146 neither caused cytotoxicity in human cortical neurons at concentrations below 5μM over a seven-day treatment in

culture nor did it block neuronal development in vitro. CZC-25146 possesses favorable pharmacokinetic properties, such as a volume of distribution of 5.4 L/kg and a clearance of 2.3 L/hr/kg that render it suitable for in-vivo studies.

[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.