

Certificate of Analysis

Print Date: Aug 28th 2019

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Product Name: CZC 54252 hydrochloride Catalog No.: 4534 Batch No.: 1

CAS Number: 1784253-05-9

IUPAC Name: N-[-[[5-Chloro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]phenyl]methanesulfonamide

hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{25}CIN_6O_4S.HCI.\frac{1}{2}H_2O$

Batch Molecular Weight: 550.46

Physical Appearance: Yellow solid

Solubility: DMSO to 100 mM

Storage: Store at +4°C

Batch Molecular Structure:

MeSO₂NH OMe

2. ANALYTICAL DATA

TLC: R_f = 0.33 (1% Aqueous Ammonia in Ethyl Acetate)

HPLC: Shows 99.4% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 48 4.94 15.27 Found 48 4.85 15.14



Product Information

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Description:

Potent inhibitor of leucine-rich repeat kinase 2 (LRRK2) (IC_{50} values are 1.28 nM and 1.85 nM for wild-type and G2019S mutant forms of LRRK2 respectively). Attenuates neuronal injury induced by LRRK2-G2019S mutant activity in primary human neurons ($EC_{50} = 1$ nM).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₂H₂₅CIN₆O₄S.HCI.½H₂O

Batch Molecular Weight: 550.46 Physical Appearance: Yellow solid

Minimum Purity: >98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Catalog No.: 4534

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Kramer *et al* (2012) Small molecule kinase inhibitors for LRRK2 and their application to Parkinson's disease models. ACS Chem.Neurosci. **3** 151. PMID: 22860184.

Ramsden et al (2011) Chemoproteomics-based design of potent LRRK2-selective lead compounds that attenuate Parkinson's disease-related toxicity in human neurons. ACS Chem.Biol. 6 1021. PMID: 21812418.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use