

# PRODUCT INFORMATION

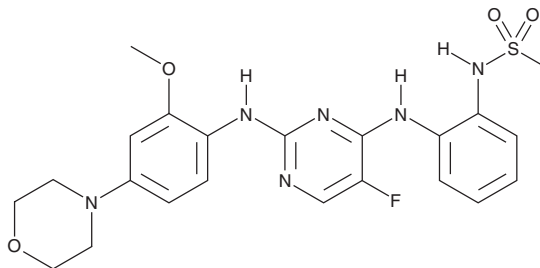


## CZC-25146

Item No. 22931

**CAS Registry No.:** 1191911-26-8  
**Formal Name:** N-[2-[[5-fluoro-2-[[2-methoxy-4-(4-morpholinyl)phenyl]amino]-4-pyrimidinyl]amino]phenyl]-methanesulfonamide

**MF:** C<sub>22</sub>H<sub>25</sub>FN<sub>6</sub>O<sub>4</sub>S  
**FW:** 488.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 281 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

CZC-25146 is supplied as a crystalline solid. A stock solution may be made by dissolving the CZC-25146 in the solvent of choice. CZC-25146 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CZC-25146 in these solvents is approximately 10 mg/ml.

CZC-25146 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CZC-25146 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CZC-25146 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

CZC-25146 is a potent inhibitor of leucine-rich repeat kinase 2 (LRRK2; IC<sub>50</sub> = 4.76 nM for the human recombinant kinase).<sup>1</sup> It also inhibits LRRK2<sup>G2019S</sup>, a mutant linked to neurotoxicity and Parkinson's disease, with an IC<sub>50</sub> value of 6.87 nM. CZC-25146 is selective for LRRK2 over a panel of kinases in HeLa cell lysates, Jurkat/Ramos mixed cell lysates, as well as whole mouse brain extracts (IC<sub>50S</sub> = >2 μM). It reduces LRRK2<sup>G2019S</sup>-induced cell injury in rat primary cortical neurons.

### Reference

1. Ramsden, N.G., Perrin, J., Ren, Z., *et al.* Chemoproteomics-based design of potent LRRK2-selective lead compounds that attenuate Parkinson's disease-related toxicity in human neurons. *ACS Chem Biol.* **6(10)**, 1021-1028 (2011).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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