

PRODUCT INFORMATION

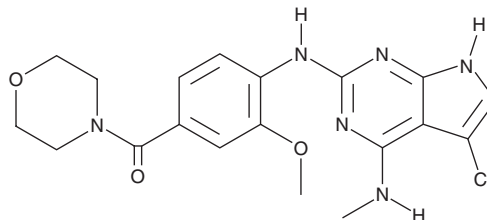


JH-II-127

Item No. 22905

CAS Registry No.: 1700693-08-8
Formal Name: [4-[[5-chloro-4-(methylamino)-7H-pyrrolo[2,3-d]pyrimidin-2-yl]amino]-3-methoxyphenyl]-4-morpholinyl-methanone

MF: C₁₉H₂₁ClN₆O₃
FW: 416.9
Purity: ≥98%
UV/Vis.: λ_{max}: 268, 321 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

JH-II-127 is supplied as a crystalline solid. A stock solution may be made by dissolving the JH-II-127 in the solvent of choice, which should be purged with an inert gas. JH-II-127 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of JH-II-127 in ethanol is approximately 2 mg/ml and approximately 30 mg/ml in DMSO and DMF.

JH-II-127 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, JH-II-127 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. JH-II-127 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

JH-II-127 is an orally bioavailable inhibitor of wild-type (WT) and mutant forms of leucine-rich repeat kinase 2 (LRRK2).¹ It inhibits WT LRRK2, as well as LRRK2 containing the G2019S and A2016T substitution mutations (IC₅₀s = 6.6, 2.2, and 47.7 nM, respectively), which are present in certain patients with Parkinson's disease, but not LRRK2 containing both mutations (IC₅₀ = 3,080 nM). JH-II-127 (0.1-0.3 μM) inhibits phosphorylation of the serines at positions 910 and 935 of WT LRRK2 and LRRK2^{G2019S} *in vitro*. It also inhibits Ser935 phosphorylation *in vivo* in mouse brain, spleen, and kidney when administered at a dose of 30 mg/kg.

Reference

1. Hatcher, J.M., Zhang, J., Choi, H.G., *et al.* Discovery of a pyrrolopyrimidine (JH-II-127), a highly potent, selective, and brain penetrant LRRK2 inhibitor. *ACS Med. Chem. Lett.* **6**(5), 584-589 (2015).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM