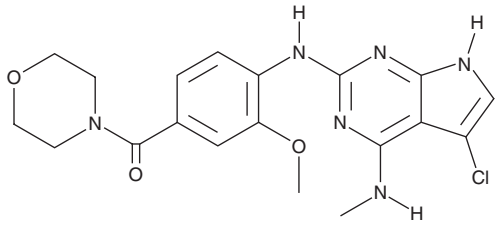
PRODUCT INFORMATION

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:	$C_{19}H_{21}ClN_6O_3$
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 (IC_{50}s = 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 (IC_{50} = 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).

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