

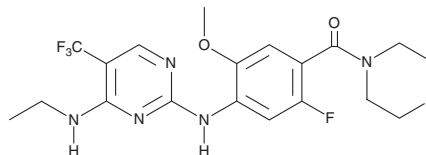
PRODUCT INFORMATION



GNE-7915

Item No. 16252

CAS Registry No.: 1351761-44-8
Formal Name: [4-[[4-(ethylamino)-5-(trifluoromethyl)-2-pyrimidinyl]amino]-2-fluoro-5-methoxyphenyl]-4-morpholinyl-methanone
MF: C₁₉H₂₁F₄N₅O₃
FW: 443.4
Purity: ≥98%
UV/Vis.: λ_{max}: 227, 268, 315 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

GNE-7915 is supplied as a crystalline solid. A stock solution may be made by dissolving the GNE-7915 in the solvent of choice, which should be purged with an inert gas. GNE-7915 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GNE-7915 in DMF is approximately 30 mg/ml and approximately 10 mg/ml in ethanol and DMSO.

Description

Leucine-rich repeat kinase 2 (LRRK2) is an enzyme that interacts with parkin, a ligase that is part of the ubiquitin-proteasome system that mediates the targeting of proteins for degradation. Loss of function of the parkin protein leads to dopaminergic cell death. The development of Parkinson's disease has been strongly associated with mutations in the LRRK2 gene that lead to increased kinase activity. GNE-7915 is a selective, brain-penetrable LRRK2 inhibitor (K_s = 2 and 18.7 nM in biochemical and cell-based assays, respectively).¹ It inhibits LRRK2 Ser¹²⁹² autophosphorylation in BAC transgenic mice expressing human LRRK2 protein with the G2019S Parkinson's disease mutation with an IC₅₀ value of 20 nM *in vivo*.¹

Reference

1. Estrada, A.A., Chan, B.K., Baker-Glenn, C., *et al.* Discovery of highly potent, selective, and brain-penetrant aminopyrazole leucine-rich repeat kinase 2 (LRRK2) small molecule inhibitors. *J. Med. Chem.* **57**(3), 921-936 (2014).

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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