

PRODUCT INFORMATION

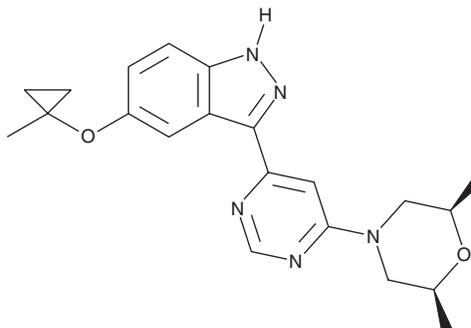


MLi-2

Item No. 19305

CAS Registry No.: 1627091-47-7
Formal Name: *rel*-3-[6-[(2R,6S)-2,6-dimethyl-4-morpholinyl]-4-pyrimidinyl]-5-[(1-methylcyclopropyl)oxy]-1H-indazole

MF: C₂₁H₂₅N₅O₂
FW: 379.5
Purity: ≥98%
UV/Vis.: λ_{max}: 221, 253, 332 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

MLi-2 is supplied as a crystalline solid. A stock solution may be made by dissolving the MLi-2 in the solvent of choice, which should be purged with an inert gas. MLi-2 is soluble in the organic solvent DMSO at a concentration of approximately 15 mg/ml.

Description

MLi-2 is an inhibitor of leucine-rich repeat kinase 2 (LRRK2; IC₅₀ = 0.76 nM).¹ It is greater than 100-fold selective for LRRK2 over a panel of 308 protein kinases, as well as a panel of receptors and ion channels, at 10 μM. It increases glucocerebrosidase (GCase) activity in dopaminergic neurons differentiated from induced pluripotent stem cells generated from skin fibroblasts isolated from patients with Parkinson's disease expressing *LRRK2* mutations when used at a concentration of 600 nM.² Dietary administration of MLi-2 (30 mg/kg per day) inhibits cortical LRRK2 phosphorylation in the MitoPark mouse model of Parkinson's disease.¹

References

1. Fell, M.J., Mirescu, C., Basu, K., *et al.* MLi-2, a potent, selective, and centrally active compound for exploring the therapeutic potential and safety of LRRK2 kinase inhibition. *J. Pharmacol. Exp. Ther.* **355**(3), 397-409 (2015).
2. Ysselstein, D., Nguyen, M., Young, T.J., *et al.* LRRK2 kinase activity regulates lysosomal glucocerebrosidase in neurons derived from Parkinson's disease patients. *Nat. Commun.* **10**(1), 5570 (2019).

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.

WARRANTY AND LIMITATION OF REMEDY

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