

Product Information

LRRK2 inhibitor, LRRK2-IN-1, Purity ≥98%

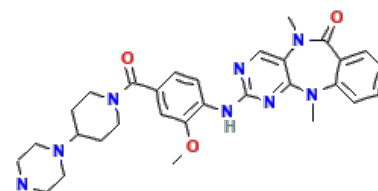
Cat. No.: X24-09-YM697

Size: 10 mg; 25 mg; 50 mg; 100 mg

CAS Number: 1234480-84-2

Compound CID: 46843906

Synonym: 1234480-84-2; LRRK2IN1; LRRK2-IN1; 2-[2-Methoxy-4-[4-(4-methylpiperazin-1-yl)piperidine-1-carbonyl]anilino]-5,11-dimethylpyrimido[4,5-b][1,4]benzodiazepin-6-one; LRRK2 inhibitor



This product is for research use only and is not intended for diagnostic use.

Product Information

Description	LRRK2-IN-1, soluble in DMSO and ethanol and insoluble in water, is an effective autophagy signaling inhibitor, that has the ability to prevent the pathway of autophagy signaling by inhibiting LRRK2. The molecular weight of the compound is 570.09, and its molecular formula is C ₃₁ H ₃₈ N ₈ O ₃ . It targets the LRRK2(G2019S), LRRK2(WT), DCLK1 and DCLK2.
Molecular Weight	570.09
Molecular Formula	C ₃₁ H ₃₈ N ₈ O ₃
Targets	LRRK2 (G2019S)
IUPAC Name	2-[2-Methoxy-4-[4-(4-methylpiperazin-1-yl)piperidine-1-carbonyl]anilino]-5,11-dimethylpyrimido[4,5-b][1,4]benzodiazepin-6-one
InChI	InChI=1S/C31H38N8O3/c1-35-15-17-38(18-16-35)22-11-13-39(14-12-22)29(40)21-9-10-24(27(19-21)42-4)33-31-32-20-26-28(34-31)36(2)25-8-6-5-7-23(25)30(41)37(26)3/h5-10,19-20,22H,11-18H2,1-4H3,(H,32,33,34)
InChI Key	IWMCPJZTADUIFX-UHFFFAOYSA-N
Canonical SMILES	CN1CCN(CC1)C2CCN(CC2)C(=O)C3=CC(=C(C=C3)NC4=NC=C5C(=N4)N(C6=CC=CC=C6C(=O)N5C)C)OC
Form	Lyophilized powder
Purity	≥98%
Impurities	Free from inappropriate visible particulates, foreign matter, discoloration, or other defects.
Solubility	<i>In vitro</i> : DMSO: 97 mg/mL (169.96 mM); Water: insoluble; Ethanol: 97 mg/mL (169.96 mM); <i>In vivo</i> : Captisol, 16 mg/mL
Identity	Confirmed by NMR/HPLC/MS.



Stability	In its lyophilized form, the chemical remains stable for 36 months.
Quality Level	Research grade
Applications	LRRK2-IN-1 can be studied extensively for its potential therapeutic applications in the treatment of Parkinson's by reducing LRRK2 activity, which may help in mitigating neurodegeneration.
Storage	Store at -20°C, and keep desiccated.
