Active Recombinant Full Length Human LRRK2 Protein, G2019S mutant, Flag tagged

Cat. No. LRRK2-10HFL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human, full length, G2019S mutant, DYKDDDDK-tagged, expressed in mammalian cells. No special measures were taken to activate this kinase.
Species	Human
Source	Mammalian Cells
ProteinLength	1-2527 aa
Description	This gene is a member of the leucine-rich repeat kinase family and encodes a protein with an ankryin repeat region, a leucine-rich repeat (LRR) domain, a kinase domain, a DFG-like motif, a RAS domain, a GTPase domain, a MLK-like domain, and a WD40 domain. The protein is present largely in the cytoplasm but also associates with the mitochondrial outer membrane. Mutations in this gene have been associated with Parkinson disease-8.
Form	50 mM Tris (pH 7.5), 150 mM NaCl, 0.5 mM EDTA, 0.02 % Triton X–100, 2 mM DTT and 50 % Glycerol.
Bio-activity	73 nmoles of phosphate transferred to ERM (LRRKtide) peptide substrate (RLGRDKYKTLRQIRQ) per minute per mg of total protein at 30 centigrade. Activity determined at a final protein concentration of 2.08 µg/mL.
AASequence	MDYKDDDDKITSLYKKAGTMASGSCQGCEEDEETLKKLIVRLNNVQEGKQIETLVQI

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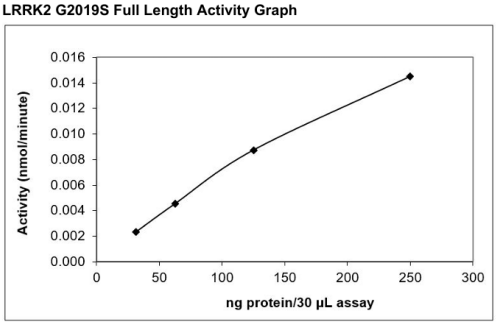
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Purity	85 % as determined by a SDS-PAGE gel stained with SimplyBlue SafeStain.
Concentration	0.40 mg/mL total protein as measured using the Bradford protein assay with BSAas a standard. Calculated: 1,390 nM.
Shipping	Dry ice

GENE INFORMATION

Gene Name	LRRK2 leucine-rich repeat kinase 2 [Homo sapiens (human)]
Official Symbol	LRRK2
Synonyms	LRRK2; leucine-rich repeat kinase 2; PARK8, Parkinson disease (autosomal dominant) 8; leucine-rich repeat serine/threonine-protein kinase 2; DKFZp434H2111; FLJ45829; RIPK7; ROCO2; augmented in rheumatoid arthritis 17; PARK8; AURA17;

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	DARDARIN
Gene ID	120892
mRNA Refseq	NM_198578
Protein Refseq	NP_940980
MIM	609007
UniProt ID	Q5S007
Activity	 **Dilution Buffer:** 20 mM Tris (pH 7.5), 0.02% Triton X−100, 0.1 mg/mL BSA, 2 mM DTT, 1 mM Na_3VO_4 and 10% Glycerol. **Assay Conditions:** LRRK2 G2019S Full Length was pre-diluted in enzyme dilution buffer and assayed in 20 mM Tris (pH 7.5), 10 mM $MgCl_2$, 1 mM EGTA, 1 mM Na_3VO_4, 5 mM β-glycerophosphate, 2 mM DTT, 0.02% Triton X−100, 100 µM ATP, 250 µM ERM (LRRKtide) peptide substrate (RLGRDKYKTLRQIRQ) and trace [^{32}P]-γ-ATP for 10 minutes at 30°C.

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SDS-PAGE

Gel Information for LRRK2 G2019S Full Length

Page Description: The SDS-PAGE and/or Native PAGE were run on 4-20% Tris-Glycine gels

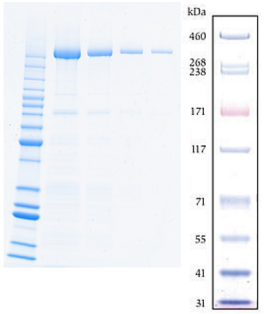
Lane 1:
Pre- Stained High Molecular Weight Protein Standard

Lane 2: 5.0 µg LRRK2 G2019S Full Length

Lane 3: 2.5 µg LRRK2 G2019S Full Length

Lane 4: 1.0 µg LRRK2 G2019S Full Length

Lane 5: 0.5 µg LRRK2 G2019S Full Length



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