

LRRK2 active protein

LRRK2 Mutant (I2020T), Active

CATALOG #
AAA14255

HOST
Sf9 cells

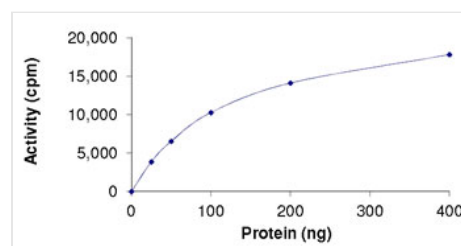
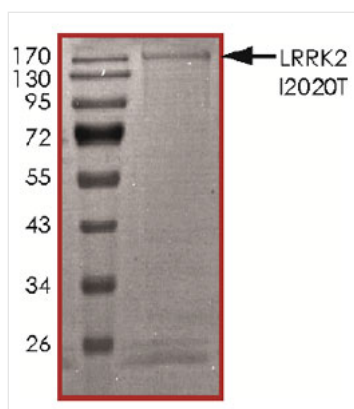
PRODUCT SYNONYMS

LRRK2; LRRK2 Mutant (I2020T); Active; LRRK2 active protein

PRODUCT SPECIFICATIONS

Host	Sf9 cells
Purity/Purification	>70%
Form/Format	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Concentration	0.05 ug/ul (varies by lot)
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

IMAGES



Specific Activity

The specific activity of LRRK2 (I2020T) was determined to be 7 nmol/min/mg as per activity assay protocol.

Purity

The purity of LRRK2 (I2020T) was determined to be >70% by densitometry, approx. MW 210 kDa.

ADDITIONAL INFORMATION

Related Product Information for LRRK2 active protein	Description: Recombinant human LRRK2 (I2020T) (968-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. The LRRK2 gene accession number is NM_198578. Scientific Background: LRRK2 or leucine-rich repeat kinase is 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. Mutations in LRRK2 are the most frequent known cause of autosomal dominant and idiopathic Parkinson's disease with prevalent mutations being found within the GTPase and kinase domains (1). LRRK2 cooperates with MET to promote efficient tumor cell growth and survival in various cancers. Down-regulation of LRRK2 in cultured tumor cells compromises MET activation and selectively reduces downstream MET signaling to mTOR and STAT3 (2).
Product Categories/Family for LRRK2 active protein	Enzymes; Active Kinase Mutants
References	1. Yao C, LRRK2-mediated neurodegeneration and dysfunction of dopaminergic neurons in a Caenorhabditis elegans model of Parkinson's disease. Neurobiol Dis. 2010 Oct;40 (1):73-81. 2. Looyenga BD, Chromosomal amplification of leucine-rich repeat kinase-2 (LRRK2) is required for oncogenic MET signaling in papillary renal and thyroid carcinomas. Proc Natl Acad Sci U S A. 2011 Jan 25;108 (4):1439-44.

NCBI AND UNIPROT INFORMATION

NCBI GI #	171846277
NCBI GeneID	120892
NCBI Accession #	NM_198578.3
NCBI GenBank Nucleotide #	NM_198578
UniProt Accession #	Q5S007; Q6ZS50; Q8NCX9; A6NJU2
NCBI Official Full Name	Homo sapiens leucine rich repeat kinase 2 (LRRK2), mRNA
NCBI Official Synonym Full Names	leucine rich repeat kinase 2
NCBI Official Symbol	LRRK2
NCBI Official Synonym Symbols	PARK8; RIPK7; ROCO2; AURA17; DARDARIN
NCBI Protein Information	leucine-rich repeat serine/threonine-protein kinase 2
UniProt Protein Name	Leucine-rich repeat serine/threonine-protein kinase 2
UniProt Gene Name	LRRK2
UniProt Synonym Gene Names	PARK8

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.