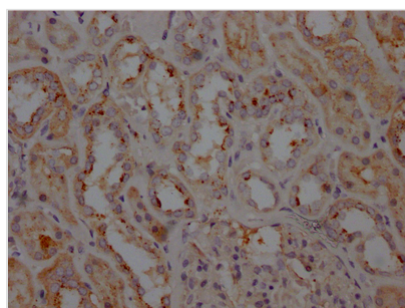




LRRK2 Recombinant Monoclonal Antibody

Product Code	CSB-RA797150A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q5S007
Immunogen	A synthesized peptide derived from human LRRK2
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	Positively regulates autophagy through a calcium-dependent activation of the CaMKK/AMPK signaling pathway. The process involves activation of nicotinic acid adenine dinucleotide phosphate (NAADP) receptors, increase in lysosomal pH, and calcium release from lysosomes. Together with RAB29, plays a role in the retrograde trafficking pathway for recycling proteins, such as mannose 6 phosphate receptor (M6PR), between lysosomes and the Golgi apparatus in a retromer-dependent manner. Regulates neuronal process morphology in the intact central nervous system (CNS). Plays a role in synaptic vesicle trafficking. Phosphorylates PRDX3. Has GTPase activity. May play a role in the phosphorylation of proteins central to Parkinson disease.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience
Gene Names	LRRK2
Clone No.	4E9

Image



IHC image of CSB-RA797150A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Description

LRRK2 belongs to the ROCO protein family and is a large multidomain protein. In cells, LRRK2 phosphorylates a set of Rab GTPases, which is accelerated by Parkinson's disease-related LRRK2 mutations. Evidence has shown that LRRK2 governs intracellular vesicle trafficking and organelle maintenance, including Golgi, endosomes, and lysosomes. LRRK2 gene mutations are a common genetic risk factor for both familial and sporadic Parkinson's disease (PD). LRRK2 kinase activity has been demonstrated to be altered by its pathogenic mutations, and aberrant increases in LRRK2 kinase activity are thought to contribute to PD pathogenesis.

CUSABIO cloned LRRK2 antibody-coding genes into plasma vectors and then transfected these vector clones into mammalian cells using a lipid-based transfection reagent. Following transient expression, the recombinant antibodies against LRRK2 were harvested and characterized. The recombinant LRRK2 antibody was purified by Affinity-chromatography from the culture medium. It can be used to detect LRRK2 protein from Human in the ELISA, IHC.