Anti-LRRK2 antibody

Description	Unconjugated Rabbit polyclonal to LRRK2

Model	STJ191973
Host	Rabbit
Reactivity	Human, Mouse
Applications	IHC
Gene ID	120892
Gene Symbol	LRRK2
Dilution range	IHC-p 1:50-300
Specificity	LRRK2 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Expressed in the brain. Expressed in pyramidal neurons in all cortical laminae of the visual cortex, in neurons of the substantia nigra pars compacta and caudate putamen (at protein level). Expressed throughout the adult brain, but at a lower level than in heart and liver. Also expressed in placenta, lung, skeletal muscle, kidney and pancreas. In the brain, expressed in the cerebellum, cerebral cortex, medulla, spinal cord occipital pole, frontal lobe, temporal lobe and putamen. Expression is particularly
Purification	LRRK2 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Leucine-rich repeat serine/threonine-protein kinase 2 Dardarin
Molecular Weight	277 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol,and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:18618OMIM:168600
Alternative Names	Leucine-rich repeat serine/threonine-protein kinase 2 Dardarin
Function	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.
Sequence and Domain Family	The seven-bladed WD repeat region is critical for synaptic vesicle trafficking and mediates interaction with multiple vesicle-associated presynaptic proteins. The Roc domain mediates homodimerization and regulates kinase activity.
Cellular Localization	Membrane. Peripheral membrane protein. Cytoplasm. Perikaryon. Mitochondrion. Golgi apparatus. Cell projection, axon. Cell projection, dendrite. Endoplasmic reticulum Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane Endosome Lysosome Mitochondrion outer membrane Mitochondrion inner membrane Mitochondrion matrix. Predominantly associated with intracytoplasmic vesicular and membranous structures . Localized in the cytoplasm and associated with cellular membrane structures. Predominantly associated with the mitochondrial outer membrane of the mitochondria. Colocalized with RAB29 along tubular structures emerging from Golgi apparatus. Localizes in intracytoplasmic punctate structures of neuronal perikarya and dendritic and axonal processes.
Post-translational Modifications	Autophosphorylated.