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LRRK2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21200b

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q5S007
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB50924

Additional Information

Other Names	Leucine-rich repeat serine/threonine-protein kinase 2, Dardarin, LRRK2, PARK8
Target/Specificity	This LRRK2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 2171-2207 amino acids from the C-terminal region of human LRRK2.
Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LRRK2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

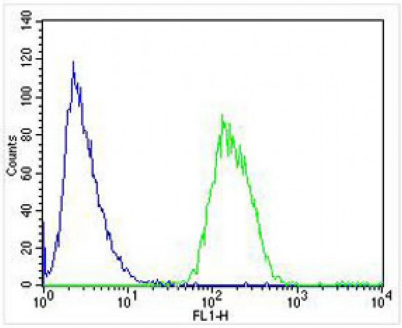
Positively regulates autophagy through a calcium- dependent activation of the CaMKK/AMPK signaling pathway. The process involves activation of nicotinic acid adenine dinucleotide phosphate (NAADP) receptors, increase in lysosomal pH, and calcium release from lysosomes. Together with RAB29, plays a role 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). Phosphorylates PRDX3. May also have GTPase

activity. May play a role in the phosphorylation of proteins central to Parkinson disease.

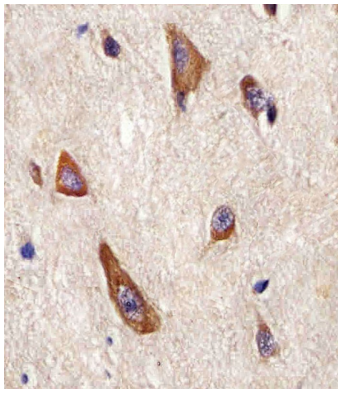
References

Zimprich A.,et al.Neuron 44:601-607(2004).
Scherer S.E.,et al.Nature 440:346-351(2006).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Adams J.R.,et al.Brain 128:2777-2785(2005).
Gloeckner C.J.,et al.Hum. Mol. Genet. 15:223-232(2006).

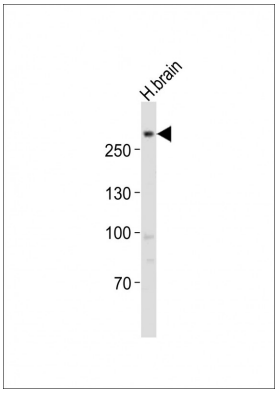
Images



Overlay histogram showing SH-SY5Y cells stained with AP21200b (green line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) (1583138) at 1/400 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



AP21200b staining LRRK2 in Human brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Anti-LRRK2 Antibody (C-term) at 1:1000 dilution + human brain lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 286 kDa Blocking/Dilution buffer: 5% NFDM/TBST.