

Synphilin-1 (SNCAIP) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6411b

Product Information

Application	WB, E
Primary Accession	<u>Q9Y6H5</u>
Other Accession	<u>NP_005451</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB7392
Calculated MW	100409
Antigen Region	593-622

Additional Information

Gene ID	9627
Other Names	Synphilin-1, Sph1, Alpha-synuclein-interacting protein, SNCAIP
Target/Specificity	This Synphilin-1 (SNCAIP) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 593-622 amino acids from the C-terminal region of human Synphilin-1 (SNCAIP).
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	Synphilin-1 (SNCAIP) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SNCAIP
Function	Isoform 2 inhibits the ubiquitin ligase activity of SIAH1 and inhibits proteasomal degradation of target proteins. Isoform 2 inhibits autoubiquitination and proteasomal degradation of SIAH1, and thereby increases cellular levels of SIAH. Isoform 2 modulates SNCA

	monoubiquitination by SIAH1.
Cellular Location	Cytoplasm. Note=Detected in cytoplasmic inclusion bodies, together with SNCA
Tissue Location	Detected in brain (at protein level). Widely expressed, with highest levels in brain, heart and placenta

Background

Parkinson is the second most common neurodegenerative disease after Alzheimers. About 1 percent of people over the age of 65 and 3 percent of people over the age of 75 are affected by the disease. The mutation is the most common cause of Parkinson disease identified to date. Synuclein alpha interacting protein (Synphilin-1) contains several protein-protein interaction domains and interacts with alpha synuclein in neurons. Mutations of SNCAIP have been linked to Parkinson disease. The amino acid sequence of synphilin-1 shows extensive homology with its human counterpart, especially in regions containing ankyrin-like motifs and the coiled-coil domain. Expression of mouse synphilin-1 in tissues is similar to its human counterpart. Synphilin-1 has an important role in the formation of aggregates and cytotoxicity in Parkinson disease and that Dorfin may be involved in the pathogenic process by ubiquitylation of synphilin-1. Role of synphilin-1 in synaptic function and protein degradation and in the molecular mechanisms leading to neurodegeneration in Parkinson disease

References

Kruger,R. Cell Tissue Res. 318 (1), 195-199 (2004) Lee,G., etal. J. Biol. Chem. 279 (8), 6834-6839 (2004) Tanaka,M., et al. J. Biol. Chem. 279 (6), 4625-4631 (2004) Nagano,Y., et al. J. Biol. Chem. 278 (51), 51504-51514 (2003) Marx,F.P., etal. Hum. Mol. Genet. 12 (11), 1223-1231 (2003) Junn,E., et al. J. Biol. Chem. 277 (49), 47870-47877 (2002) Chung,K.K., et al. Nat. Med. 7 (10), 1144-1150 (2001) Kawamata,H., et al. J. Neurochem. 77 (3), 929-934 (2001) Engelender,S., et al. Nat. Genet. 22 (1), 110-114 (1999)

Images



All lanes : Anti-Synphilin-1 (C-term) at 1:1000 dilution Lane 1: human brain lysate Lane 2: U-87 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 100 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

The anti-Synphilin-1 C-term Pab (Cat. #AP6411b) is used in Western blot to detect Synphilin-1 in mouse brain lysate.



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