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SNCA Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8649b

Product Information

Application	WB, E
Primary Accession	P37840
Other Accession	P61140, P61144, P61145
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,κ
Clone Names	1853CT506.24.16
Calculated MW	14460

Additional Information

Gene ID	6622
Other Names	Alpha-synuclein, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, NACP, SNCA, NACP, PARK1
Target/Specificity	This antibody is generated from a mouse immunized a recombinant protein from human.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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	SNCA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SNCA
Synonyms	NACP, PARK1
Function	Neuronal protein that plays several roles in synaptic activity such as regulation of synaptic vesicle trafficking and subsequent neurotransmitter

	release (PubMed:20798282, PubMed:26442590, PubMed:28288128, PubMed:30404828). Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores (PubMed:28288128, PubMed:30404828). Mechanistically, acts by increasing local Ca(2+) release from microdomains which is essential for the enhancement of ATP-induced exocytosis (PubMed:30404828). Also acts as a molecular chaperone in its multimeric membrane-bound state, assisting in the folding of synaptic fusion components called SNAREs (Soluble NSF Attachment Protein REceptors) at presynaptic plasma membrane in conjunction with cysteine string protein-alpha/DNAJC5 (PubMed:20798282). This chaperone activity is important to sustain normal SNARE-complex assembly during aging (PubMed:20798282). Also plays a role in the regulation of the dopamine neurotransmission by associating with the dopamine transporter (DAT1) and thereby modulating its activity (PubMed:26442590).
Cellular Location	Cytoplasm. Membrane Nucleus Synapse. Secreted. Cell projection, axon {ECO:0000250|UniProtKB:O55042}. Note=Membrane-bound in dopaminergic neurons (PubMed:15282274). Expressed and colocalized with SEPTIN4 in dopaminergic axon terminals, especially at the varicosities (By similarity). {ECO:0000250|UniProtKB:O55042, ECO:0000269|PubMed:15282274}
Tissue Location	Highly expressed in presynaptic terminals in the central nervous system. Expressed principally in brain

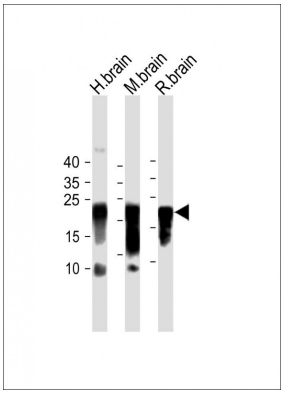
Background

May be involved in the regulation of dopamine release and transport. Induces fibrillization of microtubule-associated protein tau. Reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase-3 activation.

References

Ueda K.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:11282-11286(1993).
Campion D.,et al.Genomics 26:254-257(1995).
Ueda K.,et al.Biochem. Biophys. Res. Commun. 205:1366-1372(1994).
Xia Y.,et al.Submitted (JAN-1996) to the EMBL/GenBank/DDBJ databases.
Touchman J.W.,et al.Genome Res. 11:78-86(2001).

Images



All lanes: Anti-SNCA Antibody (C-term) at 1:1000 dilution Lane 1: human brain lysate Lane 2: mouse brain lysate Lane 3: rat brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 18KDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.