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PRODUCT DATASHEET

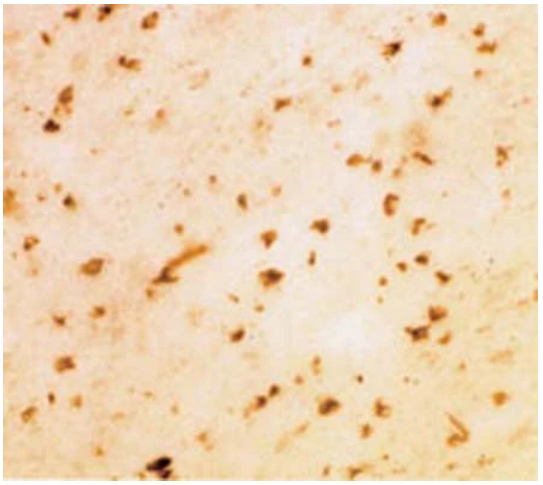
Anti-Alpha-synuclein Antibody

Product Details

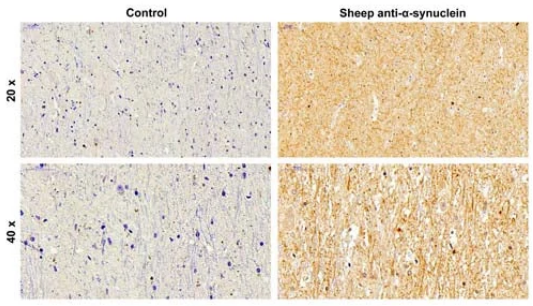
Available Variants	50 µg (SKU:S-075-50)
Conjugate	Unconjugated
Isotype	IgG
Host Species	Sheep
Format	Affinity-purified
Physical State	Lyophilized
Production Notes	Affinity purified and dialysed against phosphate buffered saline (PBS).
Applications	ELISA, IHC, WB
Dilution Ranges	WB: 0.5-2 µg/mL IHC: 1-4 µg/mL ICC: 1-4 µg/mL
Species Reactivity	Human, Mouse, Rat
Immunogen	A synthetic peptide (CMPVDPDNEAYEMPSEE) of human alpha synuclein protein (aa: 116-131) conjugated to diphtheria toxoid has been used as the immunogen.
Specificity	This antiserum specifically detects alpha synuclein. This antibody is known to react with alpha synuclein of human, mouse, rat and other rodents.
Storage	Spin vial briefly before opening. Reconstitute in 50 µL sterile-filtered, ultrapure water. Centrifuge to remove any insoluble material. After reconstitution keep aliquots at -20°C for a higher stability, and at 2-8°C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
UniProt ID	P37840 UniProt Summary: Neuronal protein that plays several roles in synaptic activity such as regulation of synaptic vesicle trafficking and subsequent neurotransmitter release. Participates as a monomer in synaptic vesicle

	exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores. Mechanistically, acts by increasing local Ca(2+) release from microdomains which is essential for the enhancement of ATP-induced exocytosis. 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. This chaperone activity is important to sustain normal SNARE-complex assembly during aging. Also plays a role in the regulation of the dopamine neurotransmission by associating with the dopamine transporter (DAT1) and thereby modulating its activity.
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.
NCBI Gene ID	6622

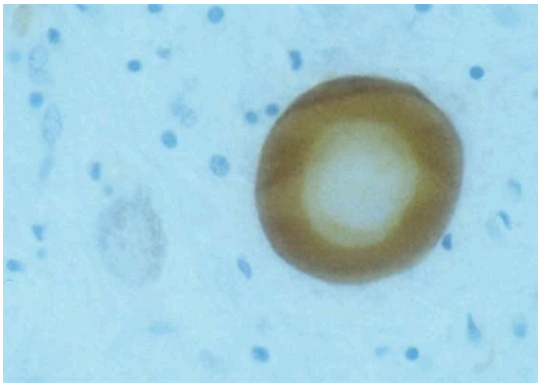
Product Images



Anti-Alpha-synuclein Antibody



Analysis of _-synuclein expression in formalin-fixed paraffin-embedded (FFPE) human Substantia Nigra tissue by **Immunohistochemistry (IHC)** using sheep antibody to _-synuclein (S-075-50, 4 µg/mL). Sections were cut to 4 um thickness and antigen retrieval performed using citrate buffer, pH 6, for 20 minutes. Primary antibody binding was visualized with a donkey anti-sheep-HRP conjugated secondary antibody (1:100) and 3'3-diaminobenzidine (DAB, brown). Cell nuclei were stained with a Hematoxylin nuclear counterstain (blue).



Immunohistochemical staining of lewy body in Parkinsons diseased human brain tissue using sheep polyclonal to human alpha synuclein, catalogue number S-075-50.