USA Tel: 1-877-374-4368 • Int. Tel: 1-718-484-3990
sales@epigentek.com • www.epigentek.com

SNCA Recombinant Monoclonal Antibody [10E5]

(Catalog # A74057)

Background
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. Acts also 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.

Description
SNCA Recombinant Monoclonal Antibody [10E5]. Unconjugated. Raised in: HEK293F Cell.

Formulation
Buffer: 0.03% Proclin 300, 50% Glycerol, 0.01M PBS, PH 7.4.

Specificity
Human

Isotype
Mouse IgG2a

Uniprot ID
P37840

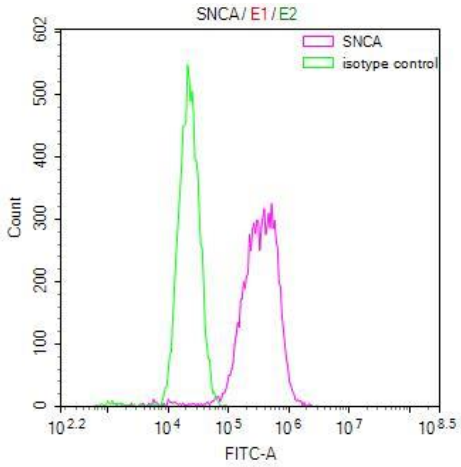
Purification
Affinity Chromatography

Immunogen
A synthesized peptide derived from Human SNCA

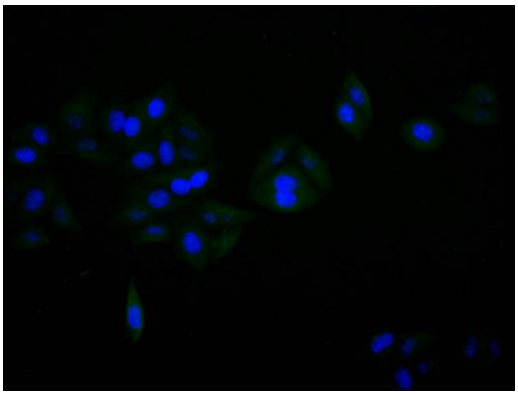
Storage
Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Alternative Names
Alpha-synuclein (Non-A beta component of AD amyloid) (Non-A4 component of amyloid precursor) (NACP), SNCA, NACP PARK1

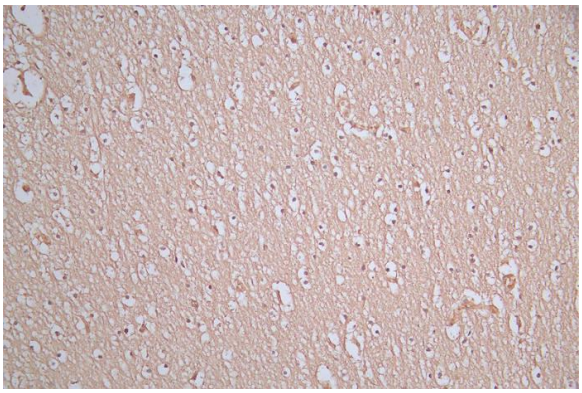
Application
ELISA, IHC, IF, FC; Recommended dilution: IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200



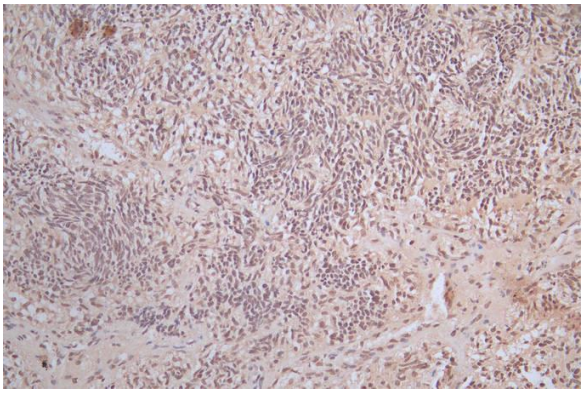
Overlay Peak curve showing SH-SY5Y cells stained with SNCA rMAb (red line) at 1:100. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg/1*10^6cells) for 45 min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/200 dilution for 35 min at 4°C. Isotype control antibody (green line) was mouse IgG1 (1µg/1*10^6cells) used under the same conditions. Acquisition of >10,000 events was performed.



Immunofluorescence staining of SH-SY5Y cell with SNCA rMAb at 1:30, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4C. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



IHC image of SNCA rMAb diluted at 1:100 and staining in paraffin-embedded human brain tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6. 0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-Mouse IgG labeled by HRP and visualized using 0. 05% DAB.



IHC image of SNCA rMAb diluted at 1:100 and staining in paraffin-embedded human glioma cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6. 0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-Mouse IgG labeled by HRP and visualized using 0. 05% DAB.