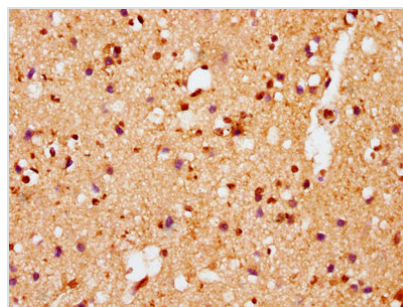




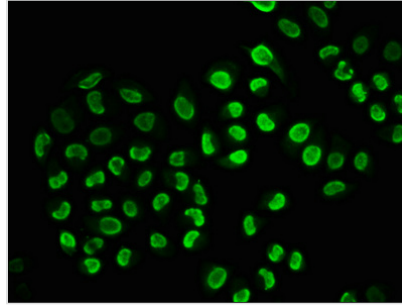
Phospho-SNCA (S129) Antibody

Product Code	CSB-RA021912A129pHUU
Abbreviation	Alpha-synuclein
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P37840
Immunogen	A synthesized peptide derived from Human Phospho-SNCA (S129)
Species Reactivity	Human
Tested Applications	ELISA, IHC, IF; Recommended dilution: IHC:1:50-1:200, IF:1:20-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Alpha-synuclein, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, NACP, SNCA, NACP, PARK1
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience
Gene Names	SNCA
Accession NO.	4G3

Image



IHC image of CSB-RA021912A129pHUU diluted at 1:100 and staining in paraffin-embedded human brain tissue performed on a Leica BondTM 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 biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of HeLa cells (treated with 100mM EGF for 20min) with CSB-RA021912A129pHU at 1:206, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The vectors expressing anti-SNCA antibody were constructed as follows: immunizing an animal with a synthesized peptide derived from human Phospho-SNCA (S129), isolating the positive splenocyte and extracting RNA, obtaining DNA by reverse transcription, sequencing and screening SNCA antibody gene, and amplifying heavy and light chain sequence by PCR and cloning them into plasma vectors. After that, the vector clones were transfected into the mammalian cells for production. The product is the recombinant SNCA antibody. Recombinant SNCA antibody in the culture medium was purified using affinity-chromatography. It can react with SNCA protein from Human and is used in the ELISA, IHC, IF.

SNCA is a protein-coding gene encoding Alpha-synuclein. Alpha-synuclein is a member of the synuclein family, which also includes beta- and gamma-synuclein. SNCA may function to integrate presynaptic signaling and membrane trafficking. According to some studies, SNCA may have the following characteristics.

SNCA variants are associated with an increased risk of multiple system atrophy. The SNCA and MAPT regions are the major genes whose common variants are influencing the risk of Parkinson's disease. Compared with LRRK2 and VPS35, SNCA mutation carriers had a younger age of onset. Autophagy regulation allows aged cells to escape SNCA-induced toxicity. SNCA-induced toxicity in aged cells is associated with selective degradation of mitochondria.