Human alpha-Synuclein antibody

Catalog Number: ANC0603

PRODUCT INFORMATION

Catalog number
ANC0603

Clone No.
5C2

Product type
Monoclonal Antibody

UnitProt No.
P37840

NCBI Accession No.
NP_000336

Alternative Names
SNCA, NACP, PARK1, PARK4, PD1, α-synuclein Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, Parkinson disease 4, autosomal dominant Lewy body

PRODUCT SPECIFICATION

Antibody Host
Mouse

Reacts With
Human

Concentration
1mg/ml (determined by BCA assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen
Recombinant human alpha-synuclein (61-95) purified from E. coli

Isotype
IgG1 kappa

Purification Note
By protein-A affinity chromatography

Application
ELISA, WB, ICC/IF

Usage
The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

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Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

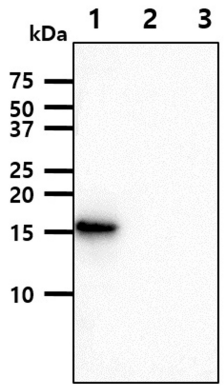
alpha-synuclein (amino acids 1-140), an acidic neuronal protein of 140 amino acids, is extremely heat-resistant and is natively unfolded with an extended structure primarily composed of random coils. alpha-synuclein has been suggested to be implicated in the pathogenesis of Parkinson's disease and related neurodegenerative disorders, and more recently, to be an important regulatory component of vesicular transport in neuronal cells. Specially, the non-Abeta component of amyloid plaques (NAC, amino acids 61-95) is a highly amyloidogenic peptide consisting of 35 amino acids which was first identified associated with senile plaques in the Alzheimer's disease brain.

General References

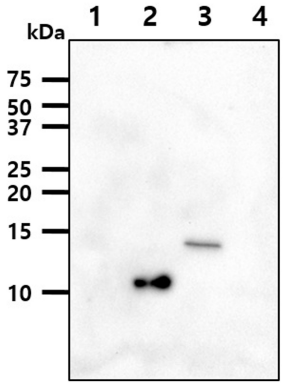
Jakes, R., et al. (1994) FEBS lett. 345:27-32.
Ueda, K., et al. (1993) Proc. Natl.Acad. Sci. USA 90:11282-11286.
Kim, J. (1997) Molecules and Cells 7:78-83.
Paik, S. R., et al. (1997) Arch. Biochem. Biophys. 344:325-334.

DATA

Western blot analysis (WB)



The recombinant proteins were resolved by SDS-PAGE, transferred to PVDF membrane and probed with human anti-alpha-Synuclein antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: Recombinant human alpha-synuclein protein
Lane 2.: Recombinant human beta-synuclein protein
Lane 3.: Recombinant human gamma-synuclein protein



The recombinant human alpha-synuclein domains were resolved by SDS-PAGE, transferred to PVDF membrane and probed with human anti-alpha-Synuclein (61-95aa) antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: Recombinant human a-synuclein(1-60aa)
Lane 2.: Recombinant human a-synuclein(1-95aa)
Lane 3.: Recombinant human a-synuclein(61-140aa)
Lane 4.: Recombinant human a-synuclein(96-140aa)

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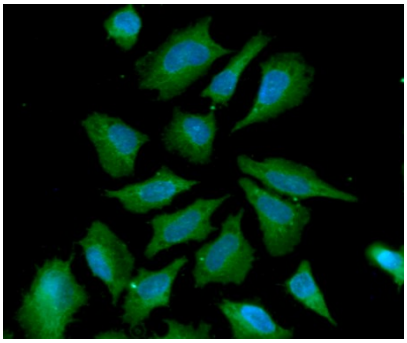
Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of alpha-Synuclein in HeLa cells. The cell was stained with ANC0603 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).