

alpha Synuclein Antibody

Mouse monoclonal antibody Catalog # AN1190

Specification

alpha Synuclein Antibody - Product Information

Application WB, IF Primary Accession P37840

Reactivity Human, Mouse, Rat

Host Mouse Clonality monoclonal

Isotype IgG1
Calculated MW 15 KDa

alpha Synuclein Antibody - Additional Information

Gene ID 6622
Gene Name SNCA

Other Names

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

Target/Specificity

Full length human alpha synuclein expressed in E. Coli.

Dilution

WB~~1:1000 IF~~1:500

Format

Mouse ascites fluid.

Antibody Specificity

Specific for the ~15kDa alpha Synuclein protein.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

alpha Synuclein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

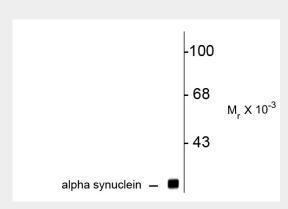
alpha Synuclein Antibody - Protocols



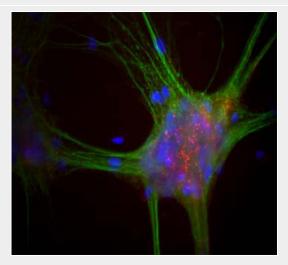
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

alpha Synuclein Antibody - Images



Western blot of rat brain lysate showing specific immunolabeling of the $\sim 15 k$ alphasynuclein protein.

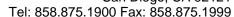


Mixed neuron-glial cultures stained with alpha-synuclein (red) andchicken MAP2 (green). The alpha-synuclein antibody stains vesicular structures, the perikarya and processes of the neurons in this image.

alpha Synuclein Antibody - Background

Alpha-synuclein is a presynaptic neuronal protein that is thought to be involved in the formation of SNARE complexes. Most significantly, aggregated alpha-synuclein is one of the major components found in the Lewy bodies that occur in Parkinson's disease (PD) and other neurodegenerative disorders (Okochi et al., 2000). Early onset Parkinson's disease may be caused by a duplication or triplication of one of the alpha synuclein genes (Chartier-Harlin MC et al., 2004 and Singleton, AB et al., 2005). Alpha-synuclein is also found in the Lewy bodies of patients with diffuse Lewy body







disease and inclusions in glial cells in the brains of patients with multiple system atrophy (MSA) and amyotrophic lateral sclerosis (ALS).

alpha Synuclein Antibody - References

Okochi M, Walter J, Koyama A, Nakajo S, Baba M, Iwatsubo T, Meijer L, Kahle PJ, Haass C (2000) Constitutive phosphorylation of the Parkinson's disease associated alpha-synuclein. J Biol Chem Jan 7;275(1): 390-7.

Chartier-Harlin, MC. et al. Alpha-synuclein locus duplication as a cause of familial Parkinson's disease. Lancet 364: 1167-1169 (2004).

Singleton, AB et al. Alpha-synuclein locus triplication causes Parkinson's disease. Science 302: 841 (2003).