10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Alpha Synuclein Antibody
Mouse monoclonal antibody
Catalog # AN1294

Specification

Anti-Alpha Synuclein Antibody - Product Information

Application	**WB, IF**
Primary Accession	P37840
Reactivity	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**14460 Da**

Anti-Alpha Synuclein Antibody - Additional Information

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

Target/Specificity
Specific for endogenous levels of the ~15 kDa alpha synuclein protein.

Dilution
WB~~1:1000
IF~~1:1000

Format
Mouse ascites fluid.

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
Anti-Alpha Synuclein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

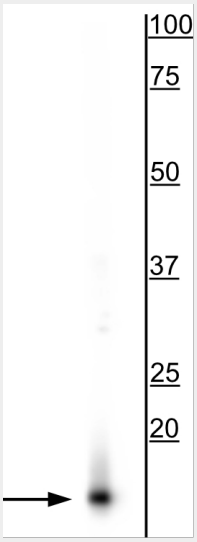
Anti-Alpha Synuclein Antibody - Protocols

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

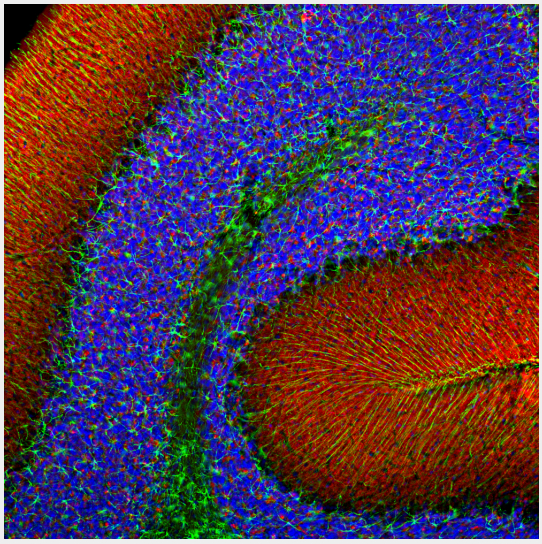
- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Alpha Synuclein Antibody - Images



Western blot of rat brain lysate showing specific immunolabeling of the ~15 kDa alpha synuclein protein.



Immunofluorescence of rat cerebellum showing specific alpha-synuclein staining in synaptic regions in red and GFAP (cat # 620-GFAP) in the cytoskeleton of glia and astrocytes in green. DNA is stained blue.

Anti-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).

Anti-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).