

**Anti-Alpha Synuclein Antibody**  
Mouse monoclonal antibody  
Catalog # AN1294**Specification**

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**Anti-Alpha Synuclein Antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">P37840</a>
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

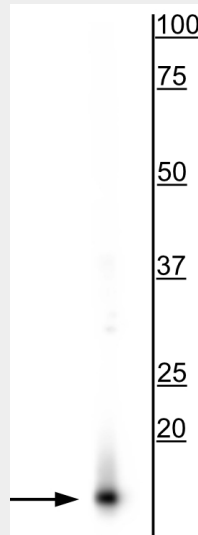
**Anti-Alpha Synuclein Antibody - Protocols**

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

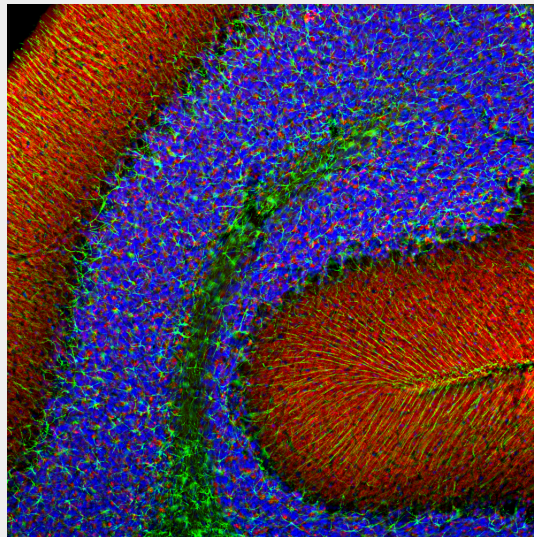
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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).