

# Anti-Alpha Synuclein Antibody

Mouse monoclonal antibody Catalog # AN1294

### **Product Information**

Application WB, IF Primary Accession P37840

**Reactivity** Human, Mouse, Rat

Host Mouse
Clonality Monoclonal

IsotypeIgG1Clone Names2A7Calculated MW14460

### **Additional Information**

Gene ID 6622

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

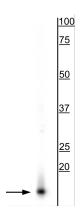
## **Background**

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).

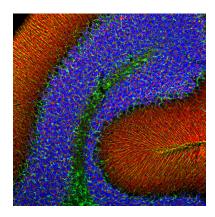
#### References

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).

### **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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.