

# alpha Synuclein Antibody

Mouse monoclonal antibody

Catalog # AN1190

## Product Information

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<b>Application</b>	IF, WB
<b>Primary Accession</b>	<a href="#">P37840</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG1
<b>Clone Names</b>	3H9
<b>Calculated MW</b>	14460

## Additional Information

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<b>Gene ID</b>	6622
<b>Gene Name</b>	SNCA
<b>Other Names</b>	Alpha-synuclein, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, NACP, SNCA, NACP, PARK1
<b>Target/Specificity</b>	Full length human alpha synuclein expressed in E. Coli.
<b>Dilution</b>	IF~~ 1:500 WB~~ 1:1000
<b>Format</b>	Mouse ascites fluid.
<b>Antibody Specificity</b>	Specific for the ~15kDa alpha Synuclein protein.
<b>Storage</b>	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.
<b>Precautions</b>	alpha Synuclein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
<b>Shipping</b>	Blue Ice

## Background

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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

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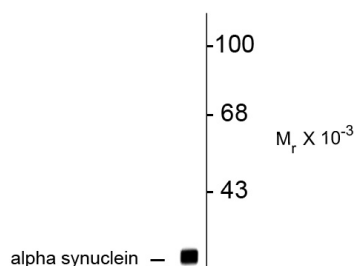
Okochi M, Walter J, Koyama A, Nakajo S, Baba M, Iwatsubo T, Meijer L, Kahle PJ, Haass C (2000) Constitutive phosphorylation of the Parkinson's disease associated alpha-synuclein. *J Biol Chem* Jan 7;275(1): 390-7.

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

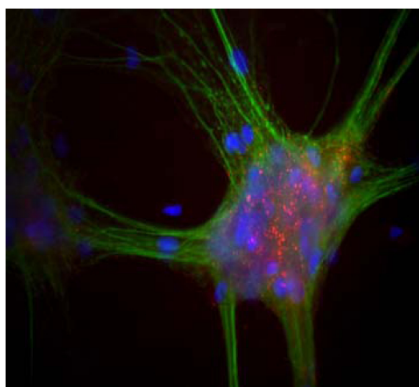
Singleton, AB et al. Alpha-synuclein locus triplication causes Parkinson's disease. *Science* 302: 841 (2003).

## Images

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Western blot of rat brain lysate showing specific immunolabeling of the ~ 15k alphasynuclein protein.



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

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