

### **Product Datasheet**

# Anti-Alpha Synuclein Antibody FL594 Conjugate



#### Overview

Catalog # 77-521-FL594

Conjugate FL594 Ex: 594 nm, Em: 615 nm

 $\begin{tabular}{lll} \textbf{Isotype} & & \textbf{IgG1} \\ \textbf{Clone Number} & & 6113-62 \\ \textbf{Size} & & 200~\mu L \\ \textbf{Concentration} & & 0.5~mg/mL \\ \end{tabular}$ 

Host Species Mouse Monoclonal

**Format** Purified by Protein A Chromatography

**Buffer** PBS with 0.09% azide

Applications ICC, IHC

**Species Reactivity** Human, Mouse, Non-Human Primate, and Rat

Immunogen Full length human alpha-synuclein (accession number P37840) produced recombinantly in E. coli.

Molecular Weight 18 kDa

Cite this Antibody Antibodies Inc Cat# 77-521-FL594, RRID: AB 2940710

#### **Details**

## **Target Description**

Alpha-synuclein (SNCA), also known as PARK1, NACP, PARK4, is a member of the synuclein family, which also includes beta- and gamma-synuclein. Alpha-synuclein is a highly conserved protein known to be abundant in neurons and especially presynaptic terminals where it serves multiple roles including regulation of synaptic vesicle trafficking and subsequent neurotransmitter release. Functionally, alpha-synuclein has been implicated in synaptic plasticity (Liu 2004) and the assembly of snare complexes (Burre 2010) and it is known to be associated with various neuropathologies including Parkinson's Disease, Lewy Body Dementia, and Alzheimer's Disease, where it forms insoluble protein aggregates. Early studies of amyloid deposits in the brains of Alzheimer's patients revealed two previously uncharacterized peptides in addition to the amyloid beta fragment (Ueda 1993), both of which were found to correspond to alpha-synuclein (SNCA). Later studies confirmed that aggregated alpha-synuclein proteins are present in brain lesions (Lewy bodies) that are hallmarks of neurodegenerative synucleinopathies and that alpha-synuclein likely plays a role in the pathogenesis of Parkinson's disease, Lewy body dementia, and Alzheimer's disease among other neuropathologies. The SNCA antibody was raised against full-length human alpha-synuclein and recognizes endogenous levels of alpha-synuclein in brain by Western blot and

immunohistochemistry.

**Specificity** No cross-reactivity reported

Purification Method Produced by in vitro bioreactor culture of hybridoma line followed by Protein A affinity

chromatography and conjugation of purified mAb. Purified mAbs are >90% specific antibody.

**Quality Control Tests** Each new lot of this antibody is tested to confirm that it recognizes a single immunoreactive band

of expected molecular weight when used in Western blot on lysate from rat whole brain.

**Storage** Aliquot and store at  $\leq$  -20°C for long term storage. For short term storage, store at 2-8°C. For

maximum recovery of product, centrifuge the vial prior to removing the cap.

#### **Our Guarantee**

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience our 50+ year passion for science.

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