# $\alpha$ -synuclein (2B2A4): sc-53879



The Power to Question

### **BACKGROUND**

The synuclein family members, including  $\alpha$ -synuclein (also designated NACP for non- $\beta$  Amyloid component) and  $\beta$ -synuclein, are predominantly expressed in the brain and are speculated to be involved in synaptic regulation and neuronal plasticity.  $\alpha$ -synuclein is localized to neuronal cell bodies and synapses.  $\alpha$ -synuclein was first identified as a component of Alzheimer's disease amyloid plaques. Abnormal platelet function in Alzheimer's disease has been demonstrated. During megakaryocytic differentiation  $\alpha$ -synuclein has been found to be upregulated, while  $\beta$ -synuclein is downregulated, indicating that coordinate expression of synucleins may be important during hematopoetic cell differentiation. A mutant form of  $\alpha$ -synuclein has been found in patients with early onset Parkinson's disease.

# **REFERENCES**

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## CHROMOSOMAL LOCATION

Genetic locus: SNCA (human) mapping to 4q21; Snca (mouse) mapping to 6 B3.

### SOURCE

 $\alpha\text{-synuclein}$  (2B2A4) is a mouse monoclonal antibody raised against purified truncated recombinant  $\alpha\text{-synuclein}$  of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g lg G^{***}$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

 $\alpha$ -synuclein (2B2A4) is recommended for detection of  $\alpha$ -synuclein of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for  $\alpha$ -synuclein siRNA (h): sc-29619.

Molecular Weight of  $\alpha$ -synuclein: 19 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812 or human brain tissue.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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