# $\alpha$ -synuclein (QQ16): sc-73662



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 4q22.1.

# **SOURCE**

 $\alpha$ -synuclein (QQ16) is a mouse monoclonal antibody raised against full length recombinant  $\alpha$ -synuclein of human origin.

## **PRODUCT**

Each vial contains 100  $\mu g \; lg G_1$  in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

# **STORAGE**

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## **APPLICATIONS**

 $\alpha$ -synuclein (QQ16) is recommended for detection of  $\alpha$ -synuclein of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with  $\beta$ -synuclein in ELISA.

Suitable for use as control antibody for  $\alpha$ -synuclein siRNA (h): sc-29619,  $\alpha$ -synuclein shRNA Plasmid (h): sc-29619-SH and  $\alpha$ -synuclein shRNA (h) Lentiviral Particles: sc-29619-V.

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

Positive Controls: SH-SY5Y cell lysate: sc-3812, human brain tissue extract or  $\alpha$ -synuclein (h): 293T Lysate: sc-111729.

## **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.

### **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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