α-synuclein (3H2897): sc-69977

**BACKGROUND**

The synuclein family members, including α-synuclein (also designated NACP for non-β-Amyloid component) and β-synuclein, are predominantly expressed in the brain and are speculated to be involved in synaptic regulation and neuronal plasticity. α-synuclein is localized to neuronal cell bodies and synapses. α-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, α-synuclein has been found to be upregulated, while β-synuclein is downregulated, indicating that coordinate expression of synucleins may be important during hematopoetic cell differentiation. A mutant form of α-synuclein has been found in patients with early onset Parkinson’s disease.

**CHROMOSOMAL LOCATION**

Genetic locus: SNCA (human) mapping to 4q22.1; Snca (mouse) mapping to 6 B3.

**SOURCE**

α-synuclein (3H2897) is a mouse monoclonal antibody raised against recombinant α-synuclein of human origin.

**PRODUCT**

Each vial contains 50 µg IgG₁ in 500 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

α-synuclein (3H2897) is recommended for detection of α-synuclein of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for α-synuclein siRNA (h): sc-29619, α-synuclein shRNA Plasmid (h): sc-29619-SH, α-synuclein shRNA Plasmid (m): sc-42286-SH, α-synuclein shRNA Plasmid (h) Lentiviral Particles: sc-29619-V and α-synuclein shRNA (m) Lentiviral Particles: sc-42286-V.

Molecular Weight of α-synuclein: 19 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, α-synuclein (h): 293T lysate: sc-117752 or IMR-32 cell lysate: sc-2409.

**STORAGE**

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

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

**DATA**

α-synuclein (3H2897): sc-69977. Western blot analysis of α-synuclein expression in non-transfected sc-117752 (A) and human α-synuclein transfected sc-117752 (B) 293T whole cell lysates.

α-synuclein (3H2897): sc-69977. Western blot analysis of α-synuclein expression in IMR-32 whole cell lysate.

**CONJUGATES**

See α-synuclein (211): sc-12767 for α-synuclein antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.

**PROTOCOLS**

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