**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 was found to be up-regulated, while β-synuclein is down-regulated, indicating that coordinate expression of synucleins may be important during hematopoietic 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 6B3.

**SOURCE**

α-synuclein (C-20)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of α-synuclein of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7011 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

α-synuclein (C-20)-R is recommended for detection of α-synuclein of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

α-synuclein (C-20)-R is also recommended for detection of α-synuclein in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for α-synuclein siRNA (h): sc-29619, α-synuclein siRNA (m): sc-42286, α-synuclein shRNA Plasmid (h): sc-29619-SH and α-synuclein shRNA Plasmid (m): sc-42286-SH, α-synuclein shRNA (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-SYSY cell lysate: sc-3812.

**STORAGE**

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

**RESEARCH USE**

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

**DATA**

α-synuclein (C-20)-R: sc-7011-R. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

**SELECT PRODUCT CITATIONS**


