

β-synuclein (C-20): sc-9565

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 upregulated, while β-synuclein is downregulated, 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.

REFERENCES

1. Ueda, K., et al. 1993. Molecular cloning of cDNA encoding an unrecognized component of amyloid in Alzheimer disease. Proc. Natl. Acad. Sci. USA 90: 11282-11286.
2. Jakes, R., et al. 1994. Identification of two distinct synucleins from human brain. FEBS Letts. 345: 27-32.

CHROMOSOMAL LOCATION

Genetic locus: SNCB (human) mapping to 5q35.2; Snca (mouse) mapping to 13 B1.

SOURCE

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

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9565 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β-synuclein (C-20) is recommended for detection of β-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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for β-synuclein siRNA (h): sc-36594, β-synuclein siRNA (m): sc-36595, β-synuclein shRNA Plasmid (h): sc-36594-SH, β-synuclein shRNA Plasmid (m): sc-36595-SH, β-synuclein shRNA (h) Lentiviral Particles: sc-36594-V and β-synuclein shRNA (m) Lentiviral Particles: sc-36595-V.

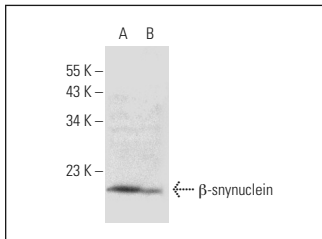
Molecular Weight of β-synuclein: 19 kDa.

Positive Controls: Mouse brain extract: sc-2253, rat brain extract: sc-2392 or SK-N-MC cell lysate: sc-2237.

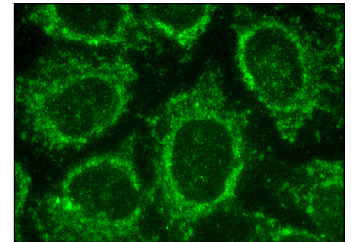
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



β-synuclein (C-20): sc-9565. Western blot analysis of β-synuclein in rat brain (A) and mouse brain (B) tissue extracts.



β-synuclein (C-20): sc-9565. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Papachroni, K.K., et al. 2007. Autoantibodies to α-synuclein in inherited Parkinson's disease. J. Neurochem. 101: 749-756.

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.

PROTOCOLS

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


 MONOS
Satisfaction
Guaranteed

Try **α/β-synuclein (F-11): sc-514908** or **α/β-synuclein (Syn 202): sc-32281**, our highly recommended monoclonal alternatives to β-synuclein (C-20).