nitrated α/β-synuclein (Syn12): sc-32278

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 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.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: SNCA (human) mapping to 4q22.1, SNCB (human) mapping to 5q35.

SOURCE

nitrated α/β-synuclein (Syn12) is a mouse monoclonal antibody raised against recombinant human α-synuclein nitrated in vitro.

PRODUCT

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

APPLICATIONS

nitrated α/β-synuclein (Syn12) is recommended for detection of nitrated α-synuclein and β-synuclein of 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/β-synuclein siRNA (h): sc-43589, α/β-synuclein shRNA Plasmid (h): sc-43589-SH and α/β-synuclein siRNA (h) Lentiviral Particles: sc-43589-V.

Molecular Weight of nitrated α/β-synuclein: 19 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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-2033 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-RTC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

nitrated α/β-synuclein (Syn12): sc-32278. Western blot analysis of untreated (A) and nitrated (B) human recombinant α-synuclein.

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.