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## Produktinformation



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Diagnostik & molekulare Diagnostik



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### Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# $\beta$ -synuclein (h2): 293T Lysate: sc-159500

## BACKGROUND

The synucleins, including  $\alpha$ -synuclein (also designated NACP for nonamyloid component precursor),  $\beta$ -synuclein (also designated PNP 14 for phosphoneuroprotein 14) and  $\gamma$ -synuclein (also designated persyn or BCSG1 for breast cancer-specific gene 1) are presynaptic proteins abundant in neurons. Synucleins are predominantly expressed in the brain and are speculated to be involved in synaptic regulation and neuronal plasticity.  $\alpha$ -Synuclein, identified as a component of Alzheimer's disease amyloid plaques, is localized to neuronal cell bodies and synapses. Coordinate expression of  $\alpha$ -synuclein and  $\beta$ -synuclein may be important during hematopoietic cell differentiation. A mutant form of  $\alpha$ -synuclein is found in patients with early onset Parkinson's disease.  $\gamma$ -synuclein is associated with axonal pathology in 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 Lett.* 345: 27-32.
3. Iwai, A., et al. 1995. The precursor protein of non-A  $\beta$  component of Alzheimer's disease amyloid is a presynaptic protein of the central nervous system. *Neuron* 14: 467-475.
4. Hashimoto, M., et al. 1997. NACP, a synaptic protein involved in Alzheimer's disease, is differentially regulated during megakaryocyte differentiation. *Biochem. Biophys. Res. Commun.* 237: 611-616.
5. Polymeropoulos, M.H., et al. 1997. Mutation in the  $\alpha$ -synuclein gene identified in families with Parkinson's disease. *Science* 276: 2045-2047.
6. da Costa, C.A., et al. 2003.  $\beta$ -synuclein displays an antiapoptotic p53-dependent phenotype and protects neurons from 6-hydroxydopamine-induced caspase 3 activation: cross-talk with  $\alpha$ -synuclein and implication for Parkinson's disease. *J. Biol. Chem.* 278: 37330-37335.
7. Wilson, C.A., et al. 2004. Degradative organelles containing mislocalized  $\alpha$ - and  $\beta$ -synuclein proliferate in Presenilin 1 null neurons. *J. Cell Biol.* 165: 335-346.

## CHROMOSOMAL LOCATION

Genetic locus: SNCB (human) mapping to 5q35.2.

## PRODUCT

$\beta$ -synuclein (h2): 293T Lysate represents a lysate of human  $\beta$ -synuclein transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## RESEARCH USE

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

## APPLICATIONS

$\beta$ -synuclein (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive  $\beta$ -synuclein antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.