SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

SANTA CRUZ BIOTECHNOLOGY, INC.

nicastrin (m): 293T Lysate: sc-122058

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The presenilin 1 (PS1) and presenilin 2 (PS2) transmembrane proteins are components of high molecular weight complexes. These complexes mediate proteolytic cleavage within the transmembrane domain of several proteins, including the β-amyloid precursor protein (βAPP) and Notch. Missense mutations in the genes encoding the presenilin proteins increase the proteolysis of βAPP and results in the overproduction of the neurotoxic amyloid β peptide, which results in a condition associated with Familial Alzheimer's disease (FAD). A novel component of the presenilin complex, nicastrin, is a type I transmembrane glycoprotein that is involved in mediating Notch/GLP-1 signaling. In addition, nicastrin contributes to the processing of βAPP, which makes nicastrin an attractive potential target for modulating the production of amyloid β in patients with Alzheimer's disease. Originally purified from immunoprecipitated PS1 complexes from HEK293 cells, nicastrin contains hydrophilic amino and carboxy-terminal domains, a short, hydrophobic transmembrane domain and potential N-myristoylation and phosphorylation sites.

REFERENCES

1. Yu, G., et al. 1998. The presenilin 1 protein is a component of a high molecular weight intracellular complex that contains β-catenin. J. Biol. Chem. 273: 16470-16475.
2. De Strooper, B., et al. 1998. Deficiency of presenilin-1 inhibits the normal cleavage of amyloid precursor protein. Nature 391: 387-390.
3. De Strooper, B., et al.1999. A presenilin-1-dependent γ-secretase-like protease mediates release of Notch intracellular domain. Nature 398: 518-522.
4. Song, W., et al. 1999. Proteolytic release and nuclear translocation of Notch-1 are induced by presenilin-1 and impaired by pathogenic presenilin-1 mutations. Proc. Natl. Acad. Sci. USA 96: 6959-6963.
5. Annaert, W., et al. 1999. Presenilins: molecular switches between proteolysis and signal transduction. Trends Neurosci. 22: 439-443.
6. Kulic, L., et al. 2000. Separation of presenilin function in amyloid β-peptide generation and endoproteolysis of Notch. Proc. Natl. Acad. Sci. USA 97: 5913-5918.
7. Yu, G., et al. 2000. Nicastrin modulates presenilin-mediated Notch/GLP-1 signal transduction and βAPP processing. Nature 407: 48-54.

CHROMOSOMAL LOCATION

Genetic locus: Ncstn (mouse) mapping to 1 H3.

PRODUCT

nicastrin (m): 293T Lysate represents a lysate of mouse nicastrin transfected 293T cells and is provided as 100 µg protein in 200 µl 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

nicastrin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive nicastrin antibodies. Recommended use: 10-20 µl per lane.

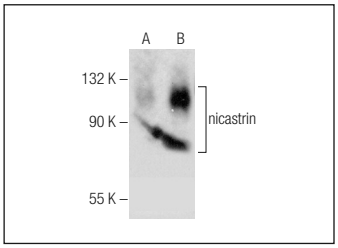
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

nicastrin (F-3): sc-377214 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse nicastrin expression in nicastrin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



nicastrin (F-3): sc-377214. Western blot analysis of nicastrin expression in non-transfected: sc-117752 (**A**) and mouse nicastrin transfected: sc-122058 (**B**) 293T whole cell lysates.

PROTOCOLS

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