



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# BACE2 (h2): 293 Lysate: sc-172845

## BACKGROUND

Autosomal dominant Alzheimer's disease is caused by mutations in the gene encoding the  $\beta$ -Amyloid protein precursor (APP). Amyloid  $\beta$ -peptide ( $A\beta$ ), the major feature of Amyloid plaques in Alzheimer's patients, is the product of APP cleavage by  $\beta$ - and  $\gamma$ -secretases. BACE is the transmembrane protease which cleaves  $A\beta$  from APP. BACE and the related protein Asp1 are both widely expressed in human tissue with the highest levels in the pancreas. BACE is localized within Golgi and endosomes.

## REFERENCES

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2. Goate, A., et al. 1991. Segregation of a missense mutation in the Amyloid precursor protein gene with familial Alzheimer's disease. *Nature* 349: 704-706.
3. Mullan, M., et al. 1992. A pathogenic mutation for probable Alzheimer's disease in the APP gene at the N-terminus of  $\beta$ -Amyloid. *Nat. Genet.* 1: 345-347.
4. Selkoe, D.J. 1998. The cell biology of  $\beta$ -Amyloid precursor protein and presenilin in Alzheimer's disease. *Trends. Cell Biol.* 8: 447-453.
5. Yan, R., et al. 1999. Membrane-anchored aspartyl protease with Alzheimer's disease  $\beta$ -secretase activity. *Nature* 402: 533-537.
6. Vassar, R., et al. 1999.  $\beta$ -secretase cleavage of Alzheimer's Amyloid precursor protein by the transmembrane aspartic protease BACE. *Science* 286: 735-741.
7. Hussain, I., et al. 1999 Identification of a Novel Aspartic Protease (Asp 2) as  $\beta$ -secretase. *Mol. Cell. Neurosci.* 14: 419-427.
8. Schmechel, A., et al. 2004. Human BACE forms dimers and colocalizes with APP. *J. Biol. Chem.* 279: 39710-39717.
9. Patel, S., et al. 2004. Apo and inhibitor complex structures of BACE ( $\beta$ -secretase). *J. Mol. Biol.* 343: 407-416.

## CHROMOSOMAL LOCATION

Genetic locus: BACE2 (human) mapping to 21q22.2.

## PRODUCT

BACE2 (h2): 293 Lysate represents a lysate of human BACE2 transfected 293 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.

## PROTOCOLS

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

## APPLICATIONS

BACE2 (h2): 293 Lysate is suitable as a Western Blotting positive control for human reactive BACE2 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

## RESEARCH USE

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