



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](https://www.linkedin.com/company/szaboscandic) 

Beta-secretase 2 (NT) (Asp1) . Rabbit Antigen Immunoaffinity Purified Polyclonal

Beta-site APP-cleaving enzyme 2, Aspartyl protease 1, Membrane-associated aspartic protease 1, Memapsin-1, Aspartic-like protease 56 kDa, Down region aspartic protease

BACKGROUND

Accumulation of the amyloid- β ($A\beta$) plaque in the cerebral cortex is a critical event in the pathogenesis of Alzheimer's disease. $A\beta$ peptide is generated by proteolytic cleavage of the β -amyloid protein precursor (APP) at β - and γ -sites by proteases. The long-sought β -secretase was recently identified by several groups independently and designated beta-site APP cleaving enzyme (BACE) and aspartyl protease 2 (Asp2)¹⁻⁴. A BACE homolog was recently cloned and designated BACE2, Asp1, DRAP (for Down region aspartic protease), and memapsin 1⁴⁻⁹. BACE2 also cleaves APP at β -site and at a different site within $A\beta$ ⁸. BACE2 locates on chromosome 21q22.3, the so-called 'Down critical region', suggesting that BACE2 and $A\beta$ may also contribute to the pathogenesis of Down syndrome^{6,7}.

ORDERING INFORMATION

CATALOG NUMBER
X1136P

SIZE
100 μ g
FORM
Unconjugated

HOST/CLONE
Rabbit

FORMULATION
Provided in phosphate buffered saline solution containing 0.02% sodium azide as a preservative

CONCENTRATION
See vial for concentration

ISOTYPE
IgG

APPLICATIONS
Western Blot

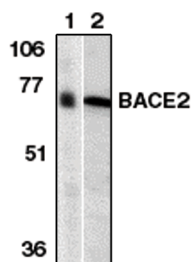
SPECIES REACTIVITY
Human, Mouse, Rat

ACCESSION NUMBER
Human Q9Y5Z0

IMMUNOGEN

Synthetic peptide corresponding to amino acids 44 to 59 of human BACE2

Western blot analysis using BACE2 (NT) antibody (Cat. No. X1136P) at 1 μ g/ml on human (1) and mouse (2) heart tissue lysate www.RemickGendron.com.



POSITIVE CONTROL/TISSUE EXPRESSION

Human heart tissue lysate

COMMENTS

Detects BACE2 by Western blot at 0.5 to 1 $\mu\text{g/ml}$. Detects an approximately 70 kDa band in human heart tissue lysate. Optimal concentration should be evaluated by serial dilutions.

PURIFICATION

Antigen Immunoaffinity Purification

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C . Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Vassar, R., et al. Beta-secretase cleavage of Alzheimer's amyloid precursor protein by the transmembrane aspartic protease BACE. *Science* 1999, 286, 735-741
2. Hussain, I., et al. Identification of a novel aspartic protease (Asp 2) as beta-secretase. *Mol. Cell Neurosci.* 1999, 14, 419-427
3. Yan, R., et al. Membrane-anchored aspartyl protease with Alzheimer's disease beta-secretase activity. *Nature* 1999, 402, 533-537
4. Sinha, S., et al. Purification and cloning of amyloid precursor protein beta-secretase from human brain. *Nature* 1999, 402, 537-540
5. Lin, X., et al. Human aspartic protease memapsin 2 cleaves the beta-secretase site of beta-amyloid precursor protein. *Proc. Natl. Acad. Sci. USA* 2000 15, 97, 1456-1460
6. Acquati, F., et al. The gene encoding DRAP (BACE2), a glycosylated transmembrane protein of the aspartic protease family, maps to the down critical region. *FEBS Lett.* 2000, 468, 59-64
7. Solans, A., et al. A new aspartyl protease on 21q22.3, BACE2, is highly similar to Alzheimer's amyloid precursor protein beta-secretase. *Cytogenet. Cell Genet.* 2000, 89, 177-184
8. Farzan, M., et al. BACE2, a beta -secretase homolog, cleaves at the beta site and within the amyloid-beta region of the amyloid-beta precursor protein. *Proc. Natl. Acad. Sci. USA* 2000, 97, 9712-9717
9. Bennett, B.D., et al. Expression analysis of BACE2 in brain and peripheral tissues. *J. Biol. Chem.* 2000, 275, 20647-20651

PRODUCT SPECIFIC REFERENCES