

## BACE 2 (CT) (Asp1) (beta site APP Cleaving Enz). Rabbit Polyclonal Antibody Human

Rabbit anti-β site APP (Amyloid β precursor protein) Cleaving Enzyme-2 (C-Terminal), Human, Mouse, Rat

### BACKGROUND

Accumulation of the amyloid-β (Aβ) plaque in the cerebral cortex is a critical event in the pathogenesis of Alzheimer's disease. Aβ 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)<sup>1-4</sup>. A BACE homolog was recently cloned and designated BACE2, Asp1, DRAP (for Down region aspartic protease), and memapsin 1<sup>4-9</sup>. BACE2 also cleaves APP at β-site and at a different site within Aβ<sup>8</sup>. BACE2 locates on chromosome 21q22.3, the so-called 'Down critical region', suggesting that BACE2 and Aβ may also contribute to the pathogenesis of Down syndrome<sup>6,7</sup>.

### ORDERING INFORMATION

**CATALOG NUMBER**  
X1137P

**SIZE**  
100 μg

**FORM**  
Unconjugated

**HOST/CLONE**  
Rabbit

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

**CONCENTRATION**  
0.5 mg/ml

**ISOTYPE**  
IgG

**APPLICATIONS**  
Western Blot

### IMMUNOGEN

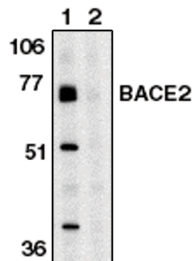
Synthetic peptide corresponding to amino acids 496 to 511 of human BACE2

### SPECIES REACTIVITY

Human

### Legend:

Western blot analysis using BACE2 (CT) antibody (Cat. No. X1137P) on human heart tissue lysate in the absence (1) and presence (2) of blocking peptide



**For research use only. Not for use in human diagnostics or therapeutics.**

**POSITIVE CONTROL/TISSUE EXPRESSION**

Human heart tissue lysate

**COMMENTS**

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

**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**

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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
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