

## BACE1 Antibody

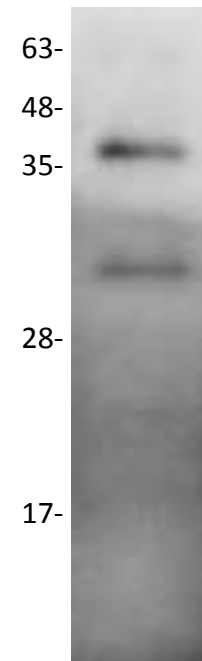
<b>CATALOG NO:</b>	6651-30T      30 µg (Trial size) 6651-100      100 µg
<b>ALTERNATE NAMES:</b>	ASP2, BACE, HSPC104, KIAA1149, Beta-secretase-1, memapsin- 2, aspartyl-protease-2, beta-site-APP-cleaving-enzyme-1
<b>HOST:</b>	Rabbit
<b>ISOTYPE:</b>	IgG
<b>IMMUNOGEN:</b>	Recombinant protein beta Secretase 1 (BV-M52)
<b>PURIFICATION:</b>	Affinity purified rabbit IgG
<b>FORM:</b>	Liquid
<b>FORMULATION:</b>	100 µg (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.01 % thimerosal, and 50 % glycerol,
<b>SPECIES REACTIVITY:</b>	Human
<b>STORAGE CONDITIONS:</b>	Store for 1 year at -20°C from date of shipment. Avoid repeated freeze/thaw cycles.

**DESCRIPTION:** Beta-secretase 1 (BACE1) also known as beta-site APP cleaving enzyme 1 (beta-site amyloid precursor protein cleaving enzyme 1), memapsin-2 (membrane-associated aspartic protease 2), and aspartyl protease 2 (ASP2),  $\beta$ -Secretase, and is a member of the peptidase A1 protein family, BACE1 is a type I integral membrane glycoprotein and aspartic protease that is found mainly in the Golgi. BACE1 is an aspartic-acid protease important in the pathogenesis of Alzheimer's disease, and in the formation of myelin sheaths in peripheral nerve cells. The transmembrane protein contains two active site aspartate residues in its extracellular protein domain and may function as a dimer. This protease is responsible for the proteolytic processing of the amyloid precursor protein (APP). Generation of the 40 or 42 amino acid-long amyloid- $\beta$  peptides that aggregate in the brain of Alzheimer's patients requires two sequential cleavages of the APP. Extracellular cleavage of APP by BACE creates a soluble extracellular fragment and a cell membrane-bound fragment referred to as C99. The elevation of BACE1 levels can be induced by amyloid plaques surrounding neurons at early stages of pathology before neuron death occurs, and may drive a positive-feedback loop in AD.

### APPLICATION:

The antibody can be used for Western blot analysis (~1:200 dilution). However, the optimal conditions should be determined individually. Other applications have not been determined.

**Note:** This information is only intended as a guide. The optimal dilutions must be determined by the user.



Western blot of beta Secretase-1 antibody

Lane 1: beta Secretase-1, 50 ng.

### RELATED PRODUCTS:

- Active Recombinant Human beta-Secretase 1 - BACE-1 (Cat. No. 7609-5, -50, -1000)
- BACE Antibody (CT) (Cat. No. 5051-100)
- BACE2 Antibody (CT) (Cat. No. 5047-100)
- BACE2 Antibody (NT) (Cat. No. 5046-100)
- Secretase-beta, human recombinant (Cat. No. 7604-20, -100, -1000)
- Human CellExp™ BACE1, human recombinant (Cat. No. 7404-10, -50)
- Human CellExp™ BACE1, human recombinant (Native) (Cat. No. 7398-10, -50)

**FOR RESEARCH USE ONLY! Not to be used on humans.**