

BACE1 Antibody (46-65), pAb, Rabbit**Cat. No.:** A00879-40**Size:** 40 µg**Synonyms:** Rabbit Anti-BACE1 (46-65) pAb;**Description:**

β-secretase, also called BACE (β-site of APP cleaving enzyme), is an aspartic-acid protease important in the pathogenesis of Alzheimers disease and in the formation of myelin sheaths in peripheral nerve cells. BACE1, also known as memapsin-2, is the major β-secretase for generation of the 40 or 42 amino-acid-long β-amyloid peptides that aggregate in the brains of Alzheimers patients. Extracellular cleavage of APP by BACE1 releases a soluble extracellular fragment and is followed by APP cleavage within its transmembrane domain by γ-secretase. The second cleavage releases the intracellular domain of APP and β-amyloid.

The immature form of BACE1 contains an N-terminal signal sequence (residues 1–21) followed by a large catalytic domain, a single transmembrane domain (residues 461–477), and a short cytoplasmic domain (residues 478–501). The signal sequence (1-21) is cleaved from the immature form, yielding the proBACE1 protein which starts at residue 22. The proBACE1 protein is modified by cleavage of 24 N-terminal residues (aa 22-45), producing the mature BACE1 protein.

GenScript **Rabbit Anti-BACE1 (46-65) Polyclonal Antibody** is developed in rabbit using a synthetic peptide, ETDEEPEEPGRRGSFVEMVD, corresponding to amino acids 46-65 of human BACE1.

GenScript Rabbit Anti-BACE1 (46-65) pAb is highly purified from rabbit antiserum by immunoaffinity chromatography and is supplied as 40 µg aliquots at concentration of 0.5 mg/ml.

Immunogen: A synthetic peptide (KLH-conjugated), ETDEEPEEPGRRGSFVEMVD, corresponding to amino acids

46-65 of human BACE1

Host: Rabbit**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Formulation:**

0.5 mg/ml in PBS, pH 7.4, containing 30% glycerol, and 0.02% sodium azide

Ig Subclass: Rabbit IgG

Specificity: GenScript Rabbit Anti-BACE1 (46-65) Polyclonal Antibody can specifically detect human BACE1. Sequence homology predicts that it will also react with mouse, rat, and bovine BACE1.

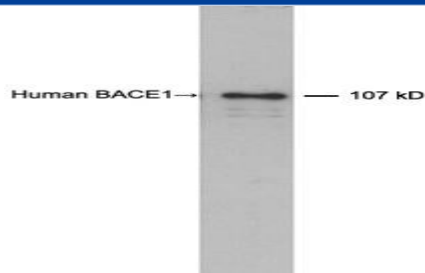
Purification: Immunoaffinity chromatography**Applications:**

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.05-0.2 µg/ml**Western blot:** 0.1-1 µg/ml**Other applications:** user-optimized**Species Reactivity:** Human**Storage:**

The antibody is stable for 2-3 weeks if stored at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example



Western blot analysis Loading: Recombinant human BACE1 expressed in *E. coli* cell lysate.

Primary Antibody: 1 µg/ml Rabbit Anti BACE1 (46-65) Polyclonal Antibody (GenScript, A00879)

Secondary Antibody: Goat Anti Rabbit IgG (H&L) [HRP] Polyclonal Antibody (GenScript, A00098)

The signal was developed with LumiSensor™ HRP Substrate Kit (GenScript, L00221V500)