

AP22917PU-N**Polyclonal Antibody to BACE2 (44-59) - Purified****Alternate names:**

AEPLC, ALP56, ASP1, ASP21, Aspartic-like protease 56 kDa, Aspartyl protease 1, Beta-secretase 2, Beta-site APP-cleaving enzyme 2, Beta-site APP-cleaving enzyme 2, Down region aspartic protease, Memapsin-1, Membrane-associated aspartic protease 1

Quantity:

50 µg

Concentration:

1 mg/ml

Background:

Accumulation of the amyloid-beta (alpha-beta) plaque in the cerebral cortex is a critical event in the pathogenesis of Alzheimer's disease. alpha-beta peptide is generated by proteolytic cleavage of the beta-amyloid protein precursor (APP) at beta- and gamma-sites by proteases. The long-sought beta-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 1 (4-9). BACE2 also cleaves APP at beta-site and at a different site within $\alpha\beta$ (8). BACE2 locates on chromosome 21q22.3, the so-called 'Down critical region', suggesting that BACE2 and alpha beta may also contribute to the pathogenesis of Down syndrome (6,7).

Uniprot ID:[Q9Y5Z0](#)**NCBI:**[NP_036237](#)**GenelD:**[25825](#)**Host:**

Rabbit

Immunogen:

BACE2 antibody was raised against synthetic peptide (aptpgpgtpaerhadg) corresponding to amino acids 44 to 59 of human BACE2

Format:**State:** Liquid purified Ig fraction**Purification:** Immunoaffinity Chromatography**Buffer System:** PBS containing 0.02% sodium azide as preservative**Applications:****ELISA.****Immunohistochemistry on Paraffin Sections:** 5 µg/ml.**Western Blot:** 0.5 - 1 µg/ml.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody reacts to Beta-site APP-cleaving Enzyme 2 (BACE2).

Species Reactivity:**Tested:** Human.**Expected from sequence similarity:** Mouse and Rat.**Storage:**

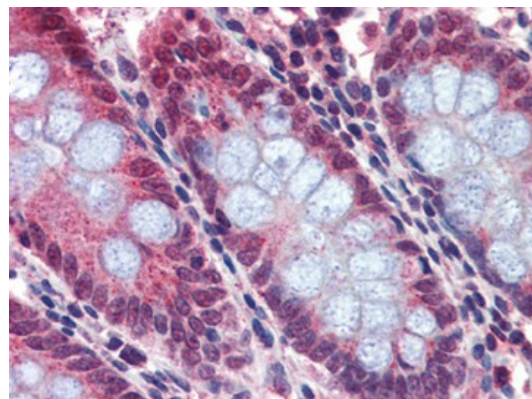
Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C to -70°C for longer.

Avoid repeated freezing and thawing.

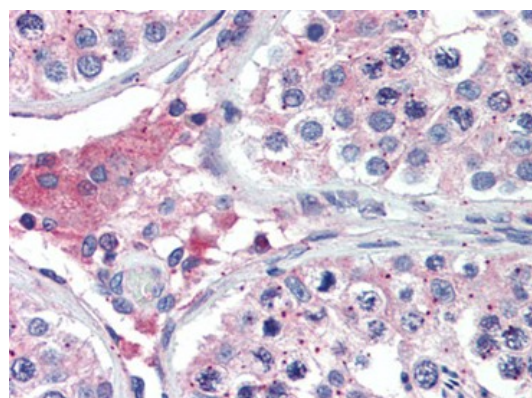
Shelf life: one year from despatch.

Pictures:

Human Colon: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Testis: Formalin-Fixed, Paraffin-Embedded (FFPE)



Western blot analysis of BACE2 in human (A) and mouse (B) heart tissue lysates with BACE2 antibody (AP22917PU-N) at 1 µg/ml.

