

**BACE2C Antibody (CT)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV11273****Specification**

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**BACE2C Antibody (CT) - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">O9Y5Z0</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	56180

**BACE2C Antibody (CT) - Additional Information****Gene ID** 25825

Positive Control	<b>Western blot: A549 cell lysate, IHC: human cancer tissue</b>
Application & Usage	<b>Western blot: ~1:1000, IHC: ~1:50-1:100.</b>

**Other Names**

BACE2; AEPLC; ALP56; ASP21; Beta-secretase 2; Aspartic-like protease 56 kDa; Aspartyl protease 1; Beta-site amyloid precursor protein cleaving enzyme 2; Down region aspartic protease; Memapsin-1; Membrane-associated aspartic protease 1; Theta-secretase

**Target/Specificity**

BACE2C

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µl of antibody in PBS with 0.09% (W/V) sodium azide

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

BACE2C Antibody (CT) is for research use only and not for use in diagnostic or therapeutic procedures.

## BACE2C Antibody (CT) - Protein Information

**Name** BACE2

**Synonyms** AEPLC, ALP56, ASP21

### Function

Responsible for the proteolytic processing of the amyloid precursor protein (APP). Cleaves APP, between residues 690 and 691, leading to the generation and extracellular release of beta-cleaved soluble APP, and a corresponding cell-associated C-terminal fragment which is later released by gamma-secretase. It has also been shown that it can cleave APP between residues 671 and 672 (PubMed:<a href="http://www.uniprot.org/citations/10591213" target="\_blank">10591213</a>, PubMed:<a href="http://www.uniprot.org/citations/11083922" target="\_blank">11083922</a>, PubMed:<a href="http://www.uniprot.org/citations/11423558" target="\_blank">11423558</a>, PubMed:<a href="http://www.uniprot.org/citations/15857888" target="\_blank">15857888</a>, PubMed:<a href="http://www.uniprot.org/citations/16816112" target="\_blank">16816112</a>). Involved in the proteolytic shedding of PMEL at early stages of melanosome biogenesis. Cleaves PMEL within the M-beta fragment to release the amyloidogenic PMEL luminal fragment containing M-alpha and a small portion of M-beta N-terminus. This is a prerequisite step for subsequent processing and assembly of PMEL fibrils into amyloid sheets (PubMed:<a href="http://www.uniprot.org/citations/23754390" target="\_blank">23754390</a>). Responsible also for the proteolytic processing of CLTRN in pancreatic beta cells (PubMed:<a href="http://www.uniprot.org/citations/21907142" target="\_blank">21907142</a>).

### Cellular Location

Cell membrane; Single-pass type I membrane protein. Golgi apparatus. Endoplasmic reticulum. Endosome Melanosome. Note=Colocalizes with PMEL in stage I and II melanosomes.

### Tissue Location

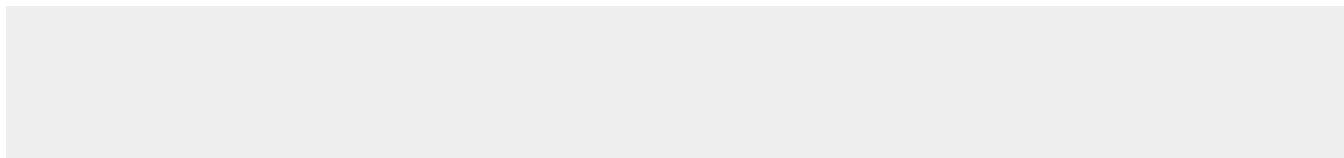
Brain. Present in neurons within the hippocampus, frontal cortex and temporal cortex (at protein level). Expressed at low levels in most peripheral tissues and at higher levels in colon, kidney, pancreas, placenta, prostate, stomach and trachea. Expressed at low levels in the brain. Found in spinal cord, medulla oblongata, substantia nigra and locus coeruleus. Expressed in the ductal epithelium of both normal and malignant prostate.

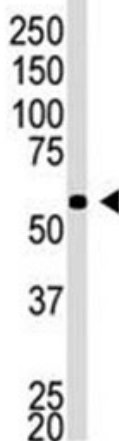
## BACE2C Antibody (CT) - Protocols

Provided below are standard protocols that you may find useful for product applications.

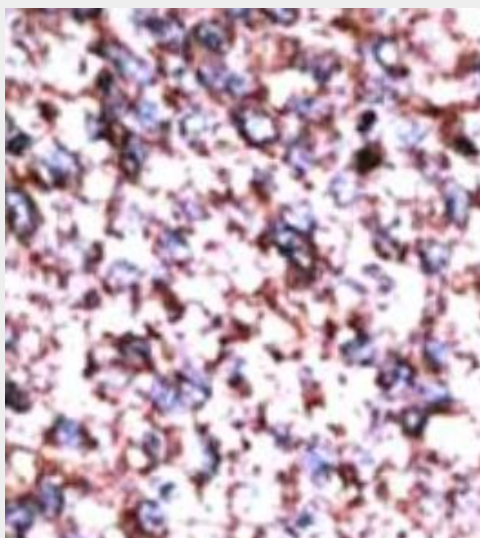
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## BACE2C Antibody (CT) - Images





The anti-BACE2C C-term Pab is used in Western blot to detect BACE2C in A549 cell lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with APOF antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated

### **BACE2C Antibody (CT) - Background**

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