

For Research Use Only

# BACE1 Polyclonal antibody

Catalog Number: 12807-1-AP

Featured Product

38 Publications



## Basic Information

**Catalog Number:**

12807-1-AP

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG3559

**GenBank Accession Number:**

BC036084

**GeneID (NCBI):**

23621

**UNIPROT ID:**

P56817

**Full Name:**

beta-site APP-cleaving enzyme 1

**Calculated MW:**

501 aa, 56 kDa

**Observed MW:**

70-75 kDa, 42-56 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB: 1:500-1:1000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:100-1:400

IF-P: 1:50-1:500

IF-Fro: 1:200-1:800

## Applications

**Tested Applications:**

WB, IHC, IF-P, IF-Fro, IP, ELISA

**Cited Applications:**

WB, IHC, IF

**Species Specificity:**

human, mouse, rat, zebrafish

**Cited Species:**

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** mouse brain tissue, human brain tissue, mouse pancreas tissue, HeLa cells, zebrafish tissue, PC-12 cells, rat brain tissue

**IP:** mouse brain tissue,

**IHC:** mouse brain tissue, human pancreas cancer tissue

**IF-P:** mouse brain tissue,

**IF-Fro:** mouse brain tissue,

## Background Information

beta-secretase, encoded by BACE1(beta-site amyloid beta A4 precursor protein-cleavage enzyme1) gene, is a neuron-specific membrane-associated protease that participate in the two step proteolytic processing of the APP. Cleaves at the N-terminus of the A-beta peptide sequence, between residues 671 and 672 of APP, leads 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 a high expression in the brain and pancreas. This protein has 6 isoforms produced by alternative splicing. BACE1 can be detected with different molecular weight: 42-56kD (prozymogen and isoforms), 65-75 (glycosylated forms) and 160kDa (dimer) (PMID:22741101; 21795680).

## Notable Publications

Author	Pubmed ID	Journal	Application
Ya-Shuo Zhao	28874056	Antioxid Redox Signal	WB
Maria Luisa Valle	36241022	Mol Cell Neurosci	WB
Yi-Wen Lin	34884565	Int J Mol Sci	WB,IHC

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

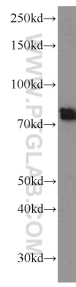
T: 4006900926

E: Proteintech-CN@ptglab.com

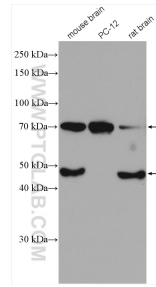
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

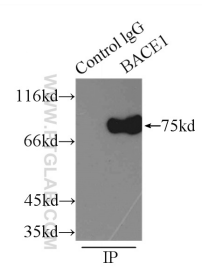
## Selected Validation Data



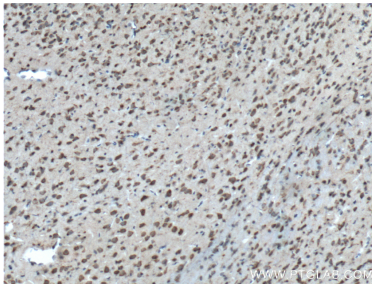
mouse brain tissue were subjected to SDS PAGE followed by western blot with 12807-1-AP (BACE1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



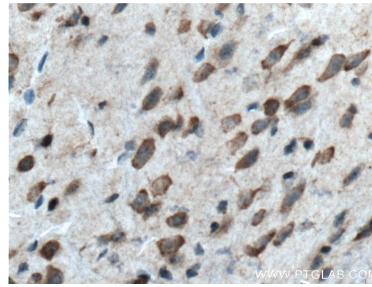
Various lysates were subjected to SDS PAGE followed by western blot with 12807-1-AP (BACE1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



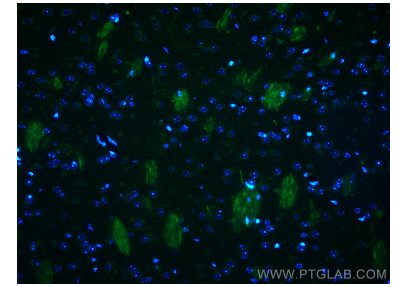
IP result of anti-BACE1 (IP:12807-1-AP, 3ug; Detection:12807-1-AP 1:500) with mouse brain tissue lysate 5000ug.



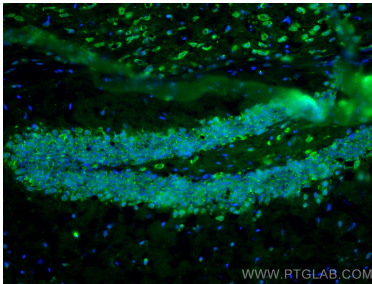
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 12807-1-AP (BACE1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 12807-1-AP (BACE1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using BACE1 antibody (12807-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using BACE1 antibody (12807-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).