

For Research Use Only

BACE1 Polyclonal antibody

Catalog Number: 12807-1-AP

Featured Product

37 Publications



Basic Information

Catalog Number:

12807-1-AP

Size:

150ul, Concentration: 400 ug/ml by Nanodrop;

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

Applications

Tested Applications:

WB, IHC, IF-P, 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,

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

*** 20ul sizes contain 0.1% BSA

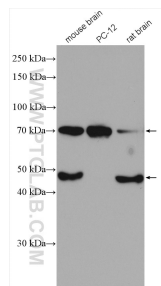
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

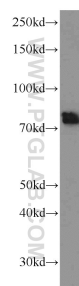
E: proteintech@ptglab.com
W: ptglab.com

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

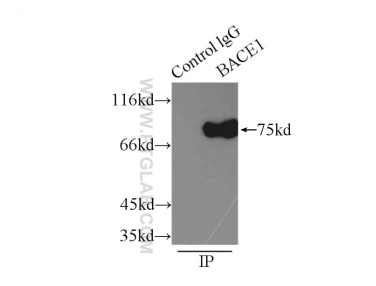
Selected Validation Data



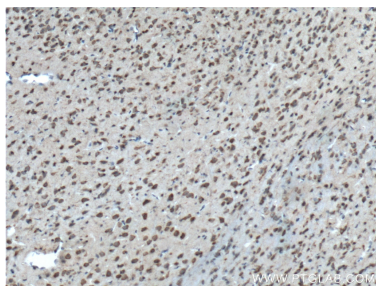
Various lysates were subjected to SDS PAGE followed by western blot with 12807-1-AP (BACE1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



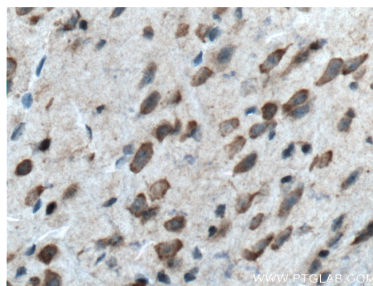
mouse brain tissue were subjected to SDS PAGE followed by western blot with 12807-1-AP (BACE1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



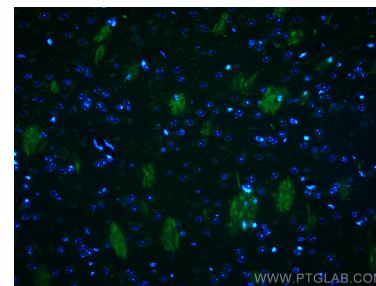
IP result of anti-BACE1 (IP:12807-1-AP, 3ug; Detection:12807-1-AP 1:500) with mouse brain tissue lysate 5000ug.



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 Goat Anti-Rabbit IgG(H+L).