For Research Use Only

BACE1 Polyclonal antibody

Catalog Number:12807-1-AP Featured Product 37 Publications

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Basic Information

Catalog Number:
12807-1-AP

Size:
150ul , Concentration: 300 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-stie amyloid beta A4 precursor protein-cleavage enzyem1) 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

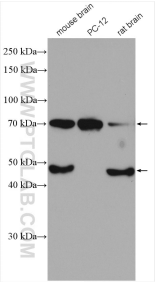
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

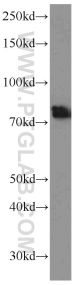
*** 20ul sizes contain 0.1% BSA

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

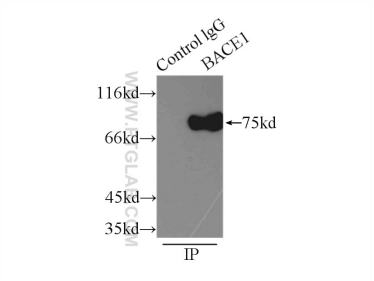
Selected Validation Data



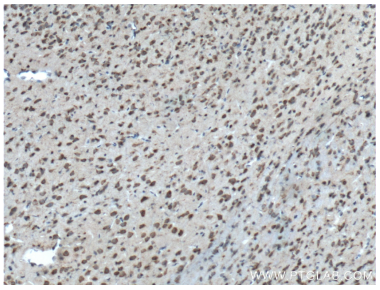
Various lysates were subjected to SDS PAGE followed by western blot with 12807-1-AP (BACE1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



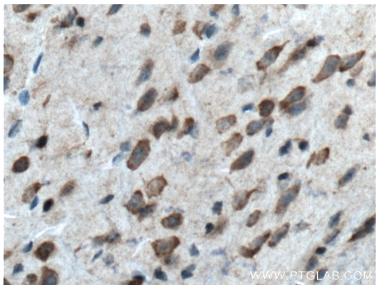
mouse brain tissue were subjected to SDS PAGE followed by western blot with 12807-1-AP (BACE1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



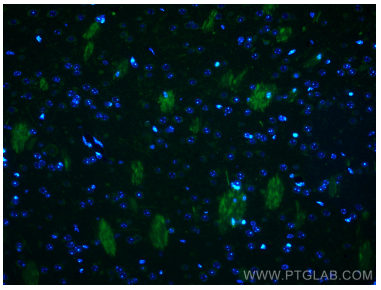
IP result of anti-BACE1 (IP:12807-1-AP, 3ug; Detection:12807-1-AP 1:500) with mouse brain tissue lysate 5000ug.



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).