

Rabbit beta Amyloid Polyclonal Antibody | anti-APP antibody

Anti-beta Amyloid Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA11597	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry

PRODUCT SYNONYMS

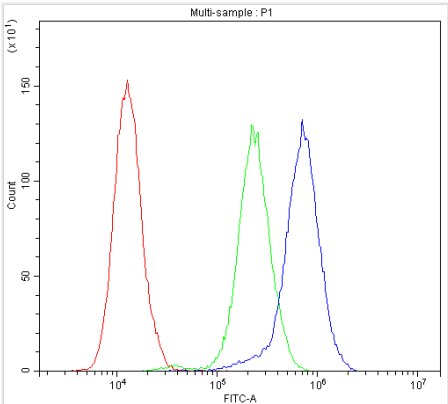
beta Amyloid; Polyclonal Antibody; Anti-beta Amyloid Antibody; Amyloid beta A4 protein; amyloid beta (A4) precursor protein; A4 antibody; A4_HUMAN antibody; AAA antibody; ABETA antibody; ABPP antibody; AD1 antibody; AICD-50 antibody; AICD-57 antibody; AICD-59 antibody; AID(50) antibody; AID(57) antibody; AID(59) antibody; Alzheimer disease amyloid protein antibody; Alzheimers Disease Amyloid Protein antibody; Amyloid B antibody; amyloid beta (A4) precursor protein antibody; amyloid beta A4 protein antibody; Amyloid Beta A4 Protein Precursor antibody; Amyloid Beta antibody; Amyloid intracellular domain 50 antibody; Amyloid intracellular domain 57 antibody; Amyloid intracellular domain 59 antibody; Amyloid of Aging and Alzheimer Disease antibody; APP antibody; APPI antibody; B Amyloid antibody; Beta APP antibody; beta-amyloid peptide antibody; Beta-APP40 antibody; Beta-APP42 antibody; C31 antibody; Cerebral Vascular Amyloid Peptide antibody; CTFgamma antibody; CVAP antibody; Gamma-CTF(50)antibody; Gamma-CTF(57) antibody; Gamma-CTF(59) antibody; peptidase nexin-II antibody; PN II antibody; PN-II antibody; PN2 antibody; PreA4 antibody; Protease nexin II antibody; Protease nexin-II antibody; S-APP-alpha antibody; S-APP-beta antibody; anti-APP antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized
Sequence Length	770
Applicable Applications for anti-APP antibody	WB (Western Blot), IHC (Immunohistochemistry)
Application Notes	Western Blot : Concentration: 0.1-0.5ug/mL ; Tested Species: Human, Mouse, Rat Immunohistochemistry-Paraffin (IHC-p): Concentration: 0.5-1ug/ml ; Tested Species: Mouse, Rat ; Predicted Species: Human ; Antigen Retrieval: By heat Immunohistochemistry-Frozen Section (IHC-Fr): Concentration: 0.5-1ug/mL ; Tested Species: Human Immunocytochemistry / Immunofluorescence (ICC/IF): Concentration: 2ug/ml ; Tested Species: Human Flow Cytometry: Concentration: 1-3ug/1X10⁶ cells ; Tested Species: Human WB: The detection limit for beta Amyloid is approximately 0.25ng/lane reducing conditions. Tested Species: In-house tested species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. By Heat: Boiling the paraffin sections in 10mM citrate buffer , pH 6.0 , for 20mins is required for that staining of formalin/paraffin sections. Other applications have not been tested. Optimal dilutions should be determined by end users.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human beta Amyloid (672-713aaDAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVVIA), different from the related mouse and rat sequences by three amino acids.

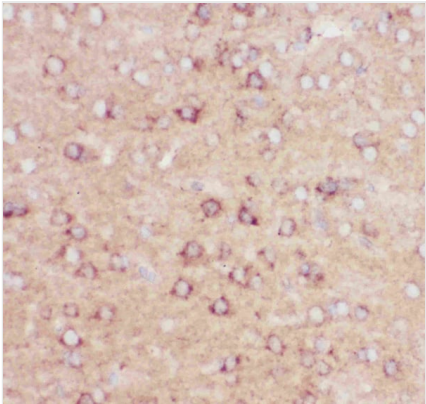
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant Detection Systems	The lab recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG () for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit) for IHC(P), IHC(F) and ICC.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



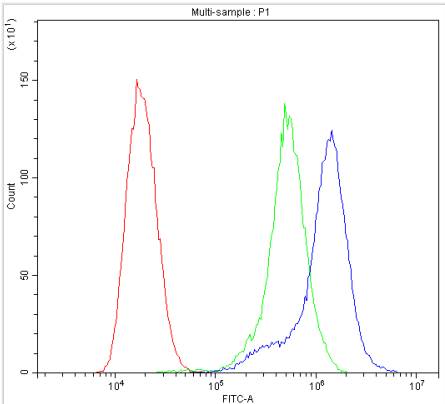
FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of PC-3 cells using anti-APP antibody (AAA11597).Overlay histogram showing PC-3 cells stained with AAA11597 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-APP Antibody (AAA11597,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



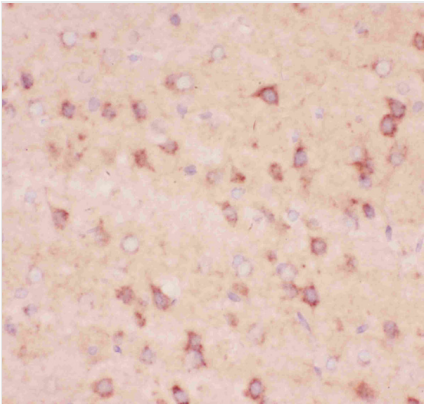
IHC (Immunohistochemistry)

Figure 4. IHC analysis of beta Amyloid using anti-beta Amyloid antibody (AAA11597). beta Amyloid was detected in paraffin-embedded section of mouse brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-beta Amyloid Antibody (AAA11597) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



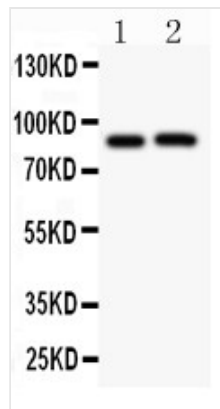
FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of SIHa cells using anti-APP antibody (AAA11597).Overlay histogram showing SIHa cells stained with AAA11597 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-APP Antibody (AAA11597,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



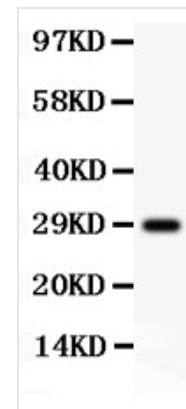
IHC (Immunohistochemistry)

Figure 3. IHC analysis of beta Amyloid using anti-beta Amyloid antibody (AAA11597). beta Amyloid was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-beta Amyloid Antibody (AAA11597) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 2. Western blot analysis of beta Amyloid using anti-beta Amyloid antibody (AAA11597). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. lane 1: rat brain tissue lysate, lane 2: mouse brain tissue lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-beta Amyloid antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for beta Amyloid at approximately 87KD. The expected band size for beta Amyloid is at 87KD.



WB (Western Blot)

Figure 1. Western blot analysis of beta Amyloid using anti-beta Amyloid antibody (AAA11597). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. lane 1: recombinant human beta-Amyloid protein 0.5ng. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-beta Amyloid antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for beta Amyloid at approximately 29KD. The expected band size for beta Amyloid is at 29KD.

ADDITIONAL INFORMATION

Related Product Information for anti-APP antibody

Description: Rabbit IgG polyclonal antibody for Amyloid beta A4 protein(APP) detection. Tested with WB, IHC-P in Human, Mouse, Rat.

Background: beta Amyloid, also called Abeta or Abeta, denotes peptides of 36-43 amino acids that are crucially involved in Alzheimer's disease as the main component of the amyloid plaques found in the brains of Alzheimer patients. It is mapped to 19q13.12. Several potential activities have been discovered for beta Amyloid, including activation of kinase enzymes, functioning as a transcription factor, and anti-microbial activity (potentially associated with beta Amyloid's pro-inflammatory activity). Moreover, monomeric beta Amyloid is indicated to protect neurons by quenching metal-inducible oxygen radical generation and thereby inhibiting neurotoxicity.

NCBI AND UNIPROT INFORMATION

NCBI GI #	112927
NCBI GeneID	351
UniProt Accession #	P05067; P09000; P78438; Q13764; Q13778; Q13793; Q16011; B2R5V1; B4DII8; D3DSD1; D3DSD2; D3DSD3
Molecular Weight	84,521 Da
NCBI Official Full Name	Amyloid beta A4 protein
NCBI Official Synonym Full Names	amyloid beta (A4) precursor protein
NCBI Official Symbol	APP
NCBI Official Synonym Symbols	AAA; AD1; PN2; ABPP; APPI; CVAP; ABETA; PN-II; CTFgamma
NCBI Protein Information	amyloid beta A4 protein; preA4; protease nexin-II; peptidase nexin-II; beta-amyloid peptide; beta-amyloid peptide(1-40); beta-amyloid peptide(1-42); alzheimer disease amyloid protein; cerebral vascular amyloid peptide
UniProt Protein Name	Amyloid beta A4 protein
UniProt Gene Name	APP
UniProt Synonym Gene Names	A4; AD1; APP; CVAP; PN-II; S-APP-alpha; S-APP-beta; AICD-59; AID(59); AICD-57; AID(57); AICD-50; AID(50)
UniProt Entry Name	A4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/beta-amyloid-antibody-western-blot-immunohistochemistry-elisa/11597>