Datasheet for ABIN5596698
anti-Abeta 1-42 antibody (C-Term)

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Overview

Quantity:	50 μg
Target:	Abeta 1-42
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat, Primate
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	Immunogen: Anti-Beta Amyloid 42 affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-terminus of AB42. Immunogen Type: Peptide
Isotype:	IgG
Cross-Reactivity (Details):	A BLAST analysis was used to suggest reactivity with human, sheep, rabbit, canine, bovne, pig, guinea pig, and monkey based on 100% sequence homology. This antibody will not react with AB40. Cross-reactivity with Beta Amyloid from other sources has not been determined.
Purification:	Anti-Beta Amyloid 42 was affinity purified from monospecific antiserum by immunoaffinity chromatography.

Target Details

Target:	Abeta 1-42
Alternative Name:	Beta Amyloid 42 (Abeta 1-42 Products)
Background:	Synonyms: ABPP, APP1, Alzheimer disease amyloid protein, Cerebral vascular amyloid peptide, Protease nexin-II
	Background: Beta Amyloid functions as a cell surface receptor and performs physiological functions on the surface of neurons relevant to neurite growth, neuronal adhesion and axonogenesis. It is expressed in all fetal tissues with the highest levels located in the brain, kidney, heart and spleen tissue. It is involved in cell mobility, transcription regulation via protein-protein interactions and copper homeostasis/oxidative stress through copper ion reduction. The copper-metallated APP induces neuronal death directly in vitro, or is potentiated through Cu2+ mediated low-density lipoprotein oxidation. It has binding capabilities via its C-terminus for transient metals such as copper, zinc and iron. It binds APBB1-KAT5 to promote transcription activation and inhibits Notch signaling through interaction with Numb. It also promotes tau aggregation and TPK II-mediated phosphorylation. Anti-Beta Amyloid 42 regulates neurite outgrowth by binding components in the cellular matrix such as heparin, collagen I and amyloid-beta peptide, leading to mitochondrial dysfunction in cultured cortical neurons. Defects in APP cause Alzheimer disease type 1 and cerebral amyloid angiopathy. This antibody is ideal for researchers interested in Cancer or Neuroscience research.
	Gene Name: APP

Application Details

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Application Notes:	Application Note: Anti-Beta Amyloid 1-42 antibody is useful for ELISA and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~86 kDa corresponding to the appropriate cell lysate or extract.
	Western Blot Dilution: 1 µg/mL
	ELISA Dilution: 1: 10,000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
	Stabilizer: 30 % Glycerol

Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Validation report #300049 for Immunohistochemistry (IHC)
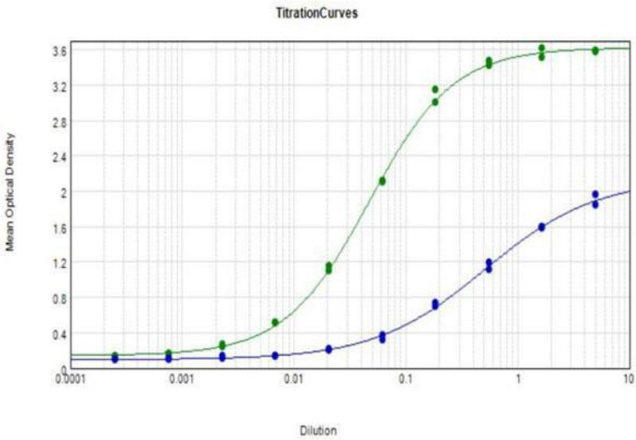
ELISA

Image 1. ELISA results of purified Polyclonal anti-beta amyloid 42 antibody tested against BSA-conjugated beta amyloid 42 peptide (green) and BSA-conjugated beta amyloid 40 peptide (blue). Each well was coated in duplicate with 0.1µg of conjugate. The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using Blocking buffer , Goat anti-Rabbit IgG HRP conjugated , and TMB substrate .