

## Biotin anti- $\beta$ -Amyloid, x-42 Antibody (Previously Covance catalog# SIG-39170)

<b>Catalog# / Size</b>	812103 / 50 $\mu$ L
<b>Clone</b>	1-11-3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Amyloid beta A4 protein, preA4, protease nexin-II, peptidase nexin-II, beta-amyloid peptide, alzheimer disease amyloid protein, cerebral vascular amyloid peptide, APP, Amyloid Precursor Protein
<b>Previously</b>	Covance Catalog# SIG-39170
<b>Isotype</b>	Rabbit IgG
<b>Description</b>	Amyloid beta ( $A\beta$ or Amyloid beta) denotes peptides of 36-43 amino acids in length that are crucially involved in Alzheimer's disease as the main component of the amyloid plaques found in the brains of Alzheimer patients. The peptides result from the amyloid precursor protein (APP), which is cut by certain enzymes to yield $A\beta$ . $A\beta$ molecules can aggregate to form oligomers (known as "seeds") which are believed to be able to induce other $A\beta$ molecules to also take the misfolded oligomeric form, leading to a chain reaction akin to a prion infection. The seeds or the resulting amyloid plaques are toxic to nerve cells. The other protein implicated in Alzheimer's disease, tau protein, also forms such prion-like misfolded oligomers, and there is some evidence that misfolded $A\beta$ can induce tau to misfold.

### Product Details

<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rabbit
<b>Formulation</b>	Phosphate-buffered solution.
<b>Preparation</b>	The antibody was purified by affinity chromatography.
<b>Concentration</b>	1 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. Please note the storage condition for this antibody has been changed from -20°C to between 2°C and 8°C. You can also check your vial or your CoA to find the most accurate storage condition for this antibody.
<b>Application</b>	<a href="#">ELISA, IHC</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">ELISA assay</a> .  The optimal working dilution should be determined for each specific assay condition. <ul style="list-style-type: none"> <li>• <b>ELISA:</b> 1:10 (then 10-fold serial dilutions)</li> <li>• <b>IHC:</b> 1:100 - 1:200*</li> </ul> <p><i>Tissue:</i> Formalin-fixed Paraffin-embedded sections  <i>Pretreatment:</i> 70% Formic Acid  <i>Primary Incubation:</i> 24 hours at 4°C</p>
<b>Application Notes</b>	This antibody is effective in Immunohistochemistry (IHC) and Enzyme-linked Immunosorbent Assay (ELISA).  *Positive control tissue: Human Alzheimer's Brain  This antibody is reactive to the C-terminus of beta amyloid and is specific for the isoform that ends at the 42nd amino acid.
<b>RRID</b>	AB_2564764 (BioLegend Cat. No. 812103)
<b>Disclaimer</b>	Covered by US patents 5,675,063 and 7,429,487. Sold under license from Epitomics.

## Antigen Details

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<b>Biology Area</b>	Cell Biology, Neurodegeneration, Neuroscience, Protein Misfolding and Aggregation
<b>Molecular Family</b>	APP/ $\beta$ -Amyloid
<b>Gene ID</b>	<a href="#">351</a>

## Related Protocols

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[Sandwich ELISA Protocol](#)

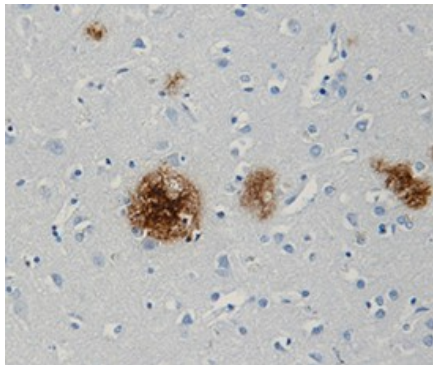
## Other Formats

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Biotin anti- $\beta$ -Amyloid, x-42, Purified anti- $\beta$ -Amyloid, x-42

## Product Data

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Positive staining of Clone 1-11-3 on formalin-fixed paraffin-embedded Human Alzheimer's Brain at 10  $\mu$ g/mL.

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587