**β-Amyloid (1-42 Specific) Antibody**

For Research Use Only. Not For Use In Diagnostic Procedures.

**Background:** Amyloid β (Aβ) precursor protein (APP) is a 100-140 kDa transmembrane glycoprotein that exists as several isoforms (1). The amino acid sequence of APP contains the amyloid domain (Aβ), which can be released by a two-step proteolytic cleavage (1). The extracellular deposition and accumulation of the released Aβ fragments form the main components of amyloid plaques in Alzheimer's disease (1). APP can be phosphorylated at several sites, which may affect the proteolytic processing and secretion of this protein (2-5). APP phosphorylated at Thr668 exists in adult rat brain and correlates with neuronal differentiation (5,6).

**Specificity/Sensitivity:** β-Amyloid (1-42 specific) Antibody recognizes the Aβ-42 isoform of the β-amyloid peptides.

**Source/Purification:** Polyclonal antibodies are produced by immunizing rabbits with a synthetic peptide corresponding to residues at the carboxy terminus of human β-amyloid (1-42) peptide. Antibodies are purified by protein A and peptide affinity chromatography.

**Background References:**

**Applications & Species Cross-Reactivity**

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<th>Applications</th>
<th>Species Cross-Reactivity*</th>
<th>Molecular Wt.</th>
<th>Source</th>
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<tr>
<td>W Recombinant</td>
<td>H, (M, R, Mk) 4 kDa Rabbit**</td>
<td>β-Amyloid Peptides</td>
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**Recommended Antibody Dilutions:**
Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at −20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

**Applications**
- **W**—Western
- **IP**—Immunoprecipitation
- **HIC**—Immunohistochemistry
- **ChIP**—Chromatin Immunoprecipitation
- **IF**—Immunofluorescence
- **F**—Flow cytometry
- **E-P**—ELISA-Peptide

**Species Cross-Reactivity Key**
- **H**—human
- **M**—mouse
- **R**—rat
- **Hm**—hamster
- **Mk**—monkey
- **Mi**—mink
- **C**—chicken
- **Dm**—D. melanogaster
- **X**—Xenopus
- **Z**—zebrafish
- **B**—bovine
- **Dg**—dog
- **Pg**—pig
- **Sc**—S. cerevisiae
- **Ce**—C. elegans
- **Hr**—horse
- **All**—all species expected

Species enclosed in parentheses are predicted to react based on 100% homology.

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Orders**
- Cell Signaling Technology® is a trademark of Cell Signaling Technology, Inc.
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