**BACKGROUND**

Beta-amyloid peptides are lipophilic metal chelators with metal-reducing activity. Bind transient metals such as copper, zinc and iron. In vitro, can reduce Cu(2+) and Fe(3+) to Cu(+) and Fe(2+), respectively. Beta-amyloid 42 is a more effective reductant than beta-amyloid 40. Beta-amyloid peptides bind to lipoproteins and apolipoproteins E and J in the CSF and to HDL particles in plasma, inhibiting metal-catalyzed oxidation of lipoproteins. Beta-APP42 may activate mononuclear phagocytes in the brain and elicit inflammatory responses. Promotes both tau aggregation and TPK II-mediated phosphorylation. Interaction with overexpressed HADH2 leads to oxidative stress and neurotoxicity.

**IMMUNOGEN**

The antiserum was produced against a chemically synthesized peptide corresponding to amino acids 1-40 of human Aβ.

**APPLICATIONS**

Immunohistochemistry, Dot Blot, Radio Immunoassay, Enzyme Immunoassay

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>CATALOG NUMBER</th>
<th>SIZE</th>
<th>FORM</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1885P</td>
<td>100 µg</td>
<td>Unconjugated</td>
</tr>
</tbody>
</table>

**CATALOG NUMBER**

X1885P

**SIZE**

100 µg

**FORM**

Unconjugated

**HOST/CLONE**

Rabbit

**FORMULATION**

Rabbit polyclonal immunoglobulin in Dulbecco’s phosphate buffered saline (without Mg2+ and Ca2+), pH 7.3 (+/- 0.1). Carrier and preservative free.

**CONCENTRATION**

See vial for concentration

**ISOTYPE**

IgG

**APPLICATIONS**

Immunohistochemistry, Dot Blot, Radio Immunoassay, Enzyme Immunoassay

**SPECIES REACTIVITY**

Human

**ACCESSION NUMBER**

P05067, Human

**POSITIVE CONTROL/TISSUE EXPRESSION**

Recognizes the sequence of Aβ [1-40] in the region from amino acids 15-30. No blocking activity was observed with Aβ [1-12] whereas the peptides. Aβ [14-35], Aβ [15-28] and Aβ [17-30] were all able to block antibody activity as well as Aβ [1-40].

**COMMENTS**

For IHC, we recommend using a 1:500 to 1:2000 dilution, for RIA and ELISA applications, a 1:2000 to 1:8000 dilution. The optimal antibody concentration should be determined for each specific application.
**Purification**
Purified from rabbit serum by epitope-specific chromatography.

**Ship Conditions**
Ship on dry ice, freeze upon arrival

**Storage Customer**
Product should be stored at -70°C. Aliquot to avoid freeze/thaw cycles

**Stability**
Products are stable for one year from purchase when stored properly

**References**


**Product Specific References**