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Polyclonal Antibody to Amyloid Oligomers (A11) - Purified

Alternate names: A11, Amyloid Oligomer AlphaBeta, amyloid, oligomers

Catalog No.: TA326459

Quantity: 0.1 ml

Concentration: 1 mg/ml

Background: Amyloid monomeric proteins can sometimes oligomerize into destructive amyloid fibrils. Amyloidogenic conformations of non-disease related proteins can be created by partial protein misfolding or denaturation. Many degenerative diseases are known to be related to the accumulation of misfolded proteins as amyloid fibres (1, 2). These include the amyloid-β peptide plaques and tau neurofibrillary tangles in senile plaques of Alzheimer's symptomology, the deposition of α-synuclein in the Lewy bodies of Parkinson's disease, and accumulation of polyglutamine-containing aggregates in Huntington's disease (2, 3).

Host / Isotype: Rabbit / IgG

Immunogen: Synthetic molecular mimic of soluble oligomers.

Format:
State: Liquid purified IgG fraction
Purification: Protein A purified
Buffer System: PBS
Preservatives: 0.09% Sodium Azide
Stabilizers: 50% Glycerol

Applications:
ELISA and **Dot Blot** (0.1-10 µg/ml).
Western Blot: 1/1000.
Immunofluorescence.
Immunoprecipitation: (1/1000).
Immunohistochemitry: (1/1000-1/10,000).
Certificate of Analysis: A 1/1000 dilution of AP31729PU-N was sufficient for detection of amyloid oligomers in 10 µg of mouse brain lysates by colorimetric immunoblot analysis using Goat anti-Rabbit IgG:HRP as the secondary antibody.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: Recognizes all types of Amyloid oligomers.
Appears to recognize a peptide backbone epitope that is common to Amyloid oligomers, but is not found in native proteins, amyloidogenic monomer or mature amyloid fibrils.

Species Reactivity: **Tested:** Human, Mouse and Rat.

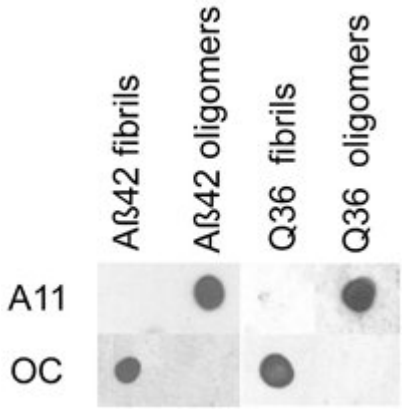
Storage: Upon receipt, store undiluted (in aliquots) at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Glabe C.G. (2004) Trends Biochem Sci. 29(10): 542-547.
2. Kayed R., et al. (2004) J Bio. Chem. 279: 46363-46366.
3. Kayed R., et al. (2003) Science. 300(5618): 486-489.

Pictures:

Dot blot analysis of Aß42 and polyQ36 prefibrillar oligomers and fibrils. Aß42 and polyQ fibrils only stain with OC serum, while Aß42 and polyQ prefibrillar oligomers only react with A11 (Catalog # TA326459).



Western blot analysis of A?42 fibrils and prefibrillar oligomers. A?42 fibrils (F) and prefibrillar oligomers (O) were run on SDS polyacrylamide gels, transferred to nitrocellulose and probed with OC and A11 antibodies.