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## Supplementary Data

## Antibody 9D5 Recognizes Oligomeric Pyroglutamate Amyloid-β in a Fraction of Amyloid-β Deposits in Alzheimer's Disease without Cross-Reactivity with other Protein Aggregates

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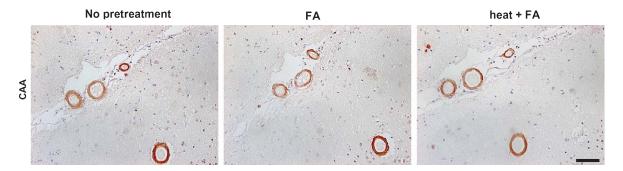
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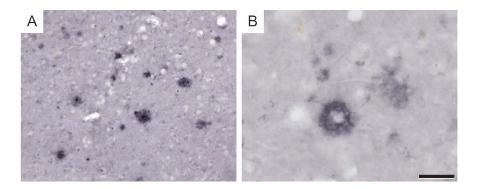
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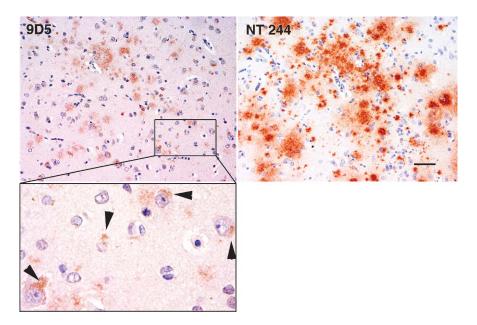
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Supplementary Figure 1. Optimized detection of amyloid deposits in vessels using antibody 9D5. Even without any antigen retrieval, 9D5 unequivocally stained CAA. Additional pretreatments, either using 3-min formic acid (FA) or combined FA followed by 60-min steam heat in citric acid buffer pH 6, did not improve staining intensity. Scale bar  $50 = \mu m$ .



Supplementary Figure 2. Representative immunoperoxidase staining with 9D5 and nickel-enhanced diaminobenzidine as chromogen in fresh-frozen brain tissue (area 7) after pretreatment with formic acid ( $10\,\text{min}$ ) from a sporadic AD case. Antibody 9D5 clearly reveals amyloid- $\beta$  deposits. Scale bar in B indicates  $200\,\mu\text{m}$  for A and  $100\,\mu\text{m}$  for B.



Supplementary Figure 3. Representative sample of the temporal cortex from a control patient. Immunostaining with antibody 9D5 reveals less extensive deposits as antibody NT244. Note that intracellular lipopigment (arrowheads) in neurons and astrocytes should not be misinterpreted as immunoreactivity (see enlarged box lower left). Scale bar indicates  $50 \, \mu m$  for upper two images and  $15 \, \mu m$  for the left lower image.