# New MOAB-2 based Aβ Oligomeric ELISA kit

Biosensis is proud to announce the release of its exclusive Oligomeric Amyloid beta (oAβ) ELISA (Catalog No: BEK-2215-2P) built upon the anti-amyloid beta monoclonal MOAB-2 (Catalog No: M-1586-100). To find our more about our Aβ MOAB-2 monoclonal antibody please visit our Enhanced Product Information Sheet.

Aβ Oligomeric ELISA

This is the first oligomeric amyloid beta ELISA to take advantage of MOAB-2's high specificity and avidity for beta amyloid peptides and combine it in a proprietary formulation that allows for the detection of amyloid beta oligomers and complexes present in mouse and human CSF and brain tissue extracts. The ELISA comes complete and ready to use with all the necessary buffers and detection reagents as well as ready-to-polymerize human Aβ 1-42 peptide standards.

Biosensis retains exclusive worldwide rights for MOAB-2 based immunoassays and this is the first of a family of critical Alzheimer's Disease biomarker assays to be released by Biosensis for neurological disease research. Biosensis' oAβ ELISA results match that published in the literature for AD patients and transgenic mouse models, and improves them by providing extremely low backgrounds, superb low end sensitivity, a broad dynamic range and great reproducibility.
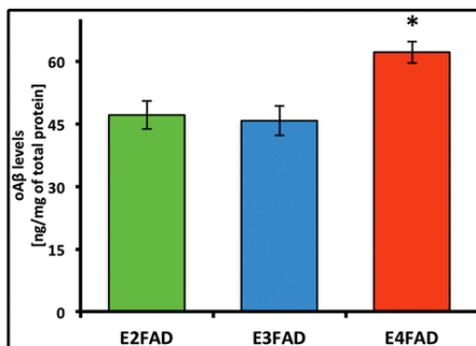

Great dynamic range!
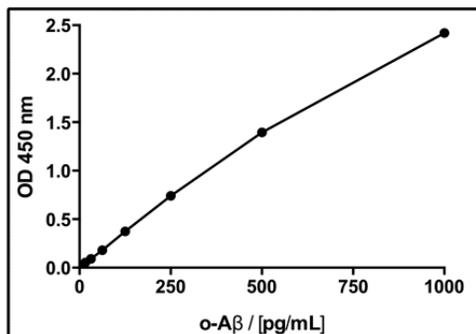
Superb low end sensitivity!
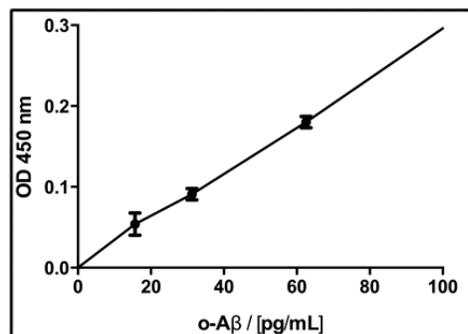
Validated by Literature!

- oAβ levels: E4FAD > E3FAD = E2FAD.
- Results are consistent with Tai et al, JBC, 2013.
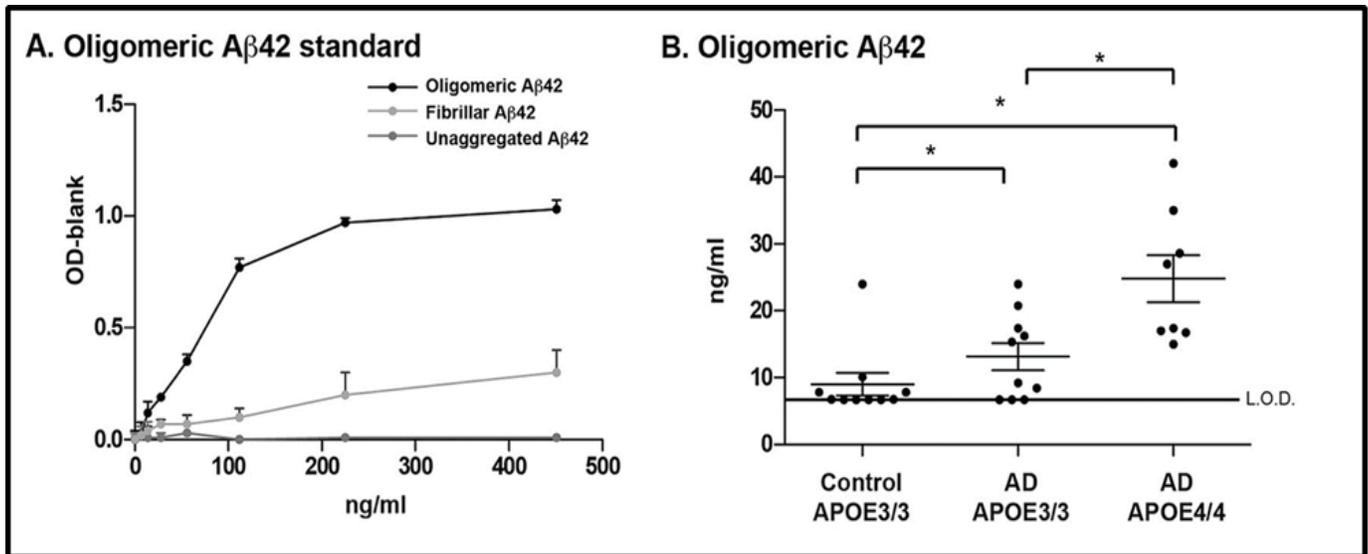- Validates oAβ detection by Biosensis ELISA in transgenic mice brain homogenates.

With the release of the Biosensis oAβ ELISA researchers now have the research tool available to examine questions surrounding the role of amyloid beta oligomers in both normal and disease states as well as monitor oAβ levels while in search of effective anti-Alzheimer's therapies. Among the scenarios where the Biosensis ELISA has already been shown to function include the following:
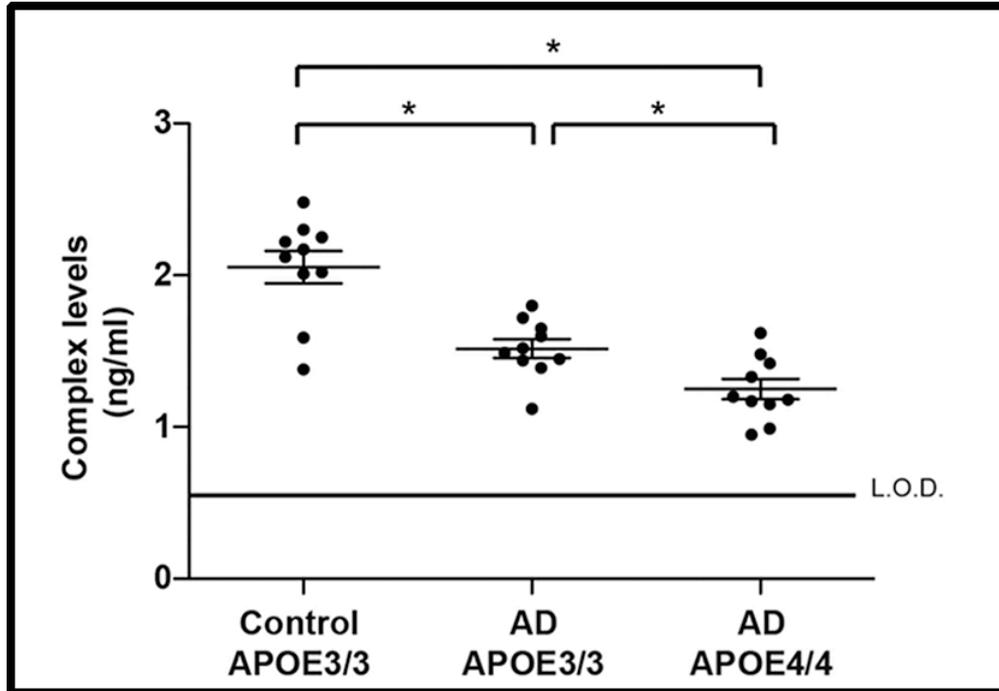
Transgenic animal and tissue situations:
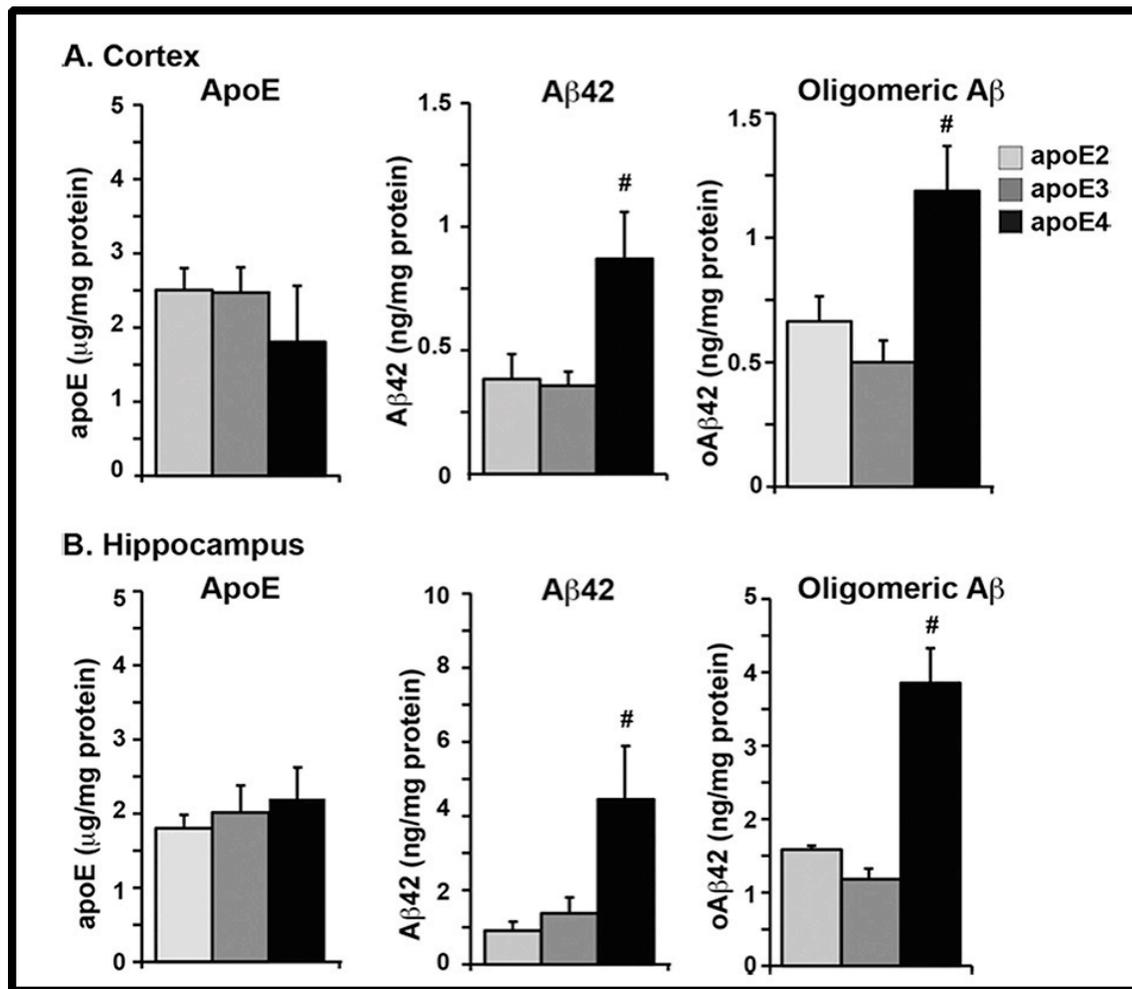
Figure: Soluble Aβ42 and soluble oligomeric Aβ levels are higher in E4FAD mice compared with E2FAD and E3FAD mice. ApoE, Aβ42, and oAβ in the TBS/soluble extraction fraction of the (A) cortex and (B) hippocampus in 6-month EFAD mice measured by ELISA. Data are expressed as mean ± SEM and were analyzed by one-way ANOVA followed by Tukey's multiple comparison post-hoc analysis. #$p < 0.05$ vs. apoE2 and apoE3.

Youmans, KL et al (2012) Journal Biological Chemistry, 287(50): 41774-86. PubMed ID: 23293020.

Human CSF & fluid research situations:

Figure: Oligomeric Aβ, Aβ42 in human CSF. (A) Standard curve for oligomeric Aβ ELISA: 0-500 ng/ml of oligomeric-, fibrillar- and unaggregated-Aβ42 preparations. (B) oAβ measured in the CSF from age matched control subjects (APOE3/3) and AD patients (APOE3/3 and APOE4/4)... Data are expressed as mean ± SEM, analyzed by one-way ANOVA followed by Tukey's multiple comparison post-hoc analysis. $p < 0.05$. L.O.D = Limit of detection.

Tai LM et al (2013) The Journal of Biological Chemistry, 288(8): 5914-5926. PubMed ID: 23293020.

And Alzheimer's Research and Biomarker Analysis situations:

Figure: The levels of soluble ApoE/Aβ were lower and those of oAβ were higher in samples taken from AD patients compared with those in control samples; within the AD cohort, those with APOE4 had less ApoE/Aβ complex and more oAβ than those with APOE3. The investigators believe that soluble oAβ clearance occurs in an ApoE isoform-specific manner via the ApoE/Aβ complex and suggest that oAβ and ApoE/Aβ are mechanistic biomarkers.

Coming soon: MOAB-2 based Aβ/APOE & Aβ/APOJ complex ELISAs ONLY from Biosensis.

Visit our ELISA kit page for a full list of more than 200 ELISA kits available.

Biosensis has released of a new range of *Rapid*™ ELISA kits for the quantification of BDNF, proBDNF and NGF. Get the same sensitivity and specificity that you are used to, but now quantification of your target protein requires less than 3 hours! Click here for more information.