Agrisera

contact: support@agrisera.com

Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Product no AS13 2716

mAB-M | Mouse anti-human Abeta protein (3-10) region, oligomer-specific (clone 2D10.F6)

Product information

Background	Alzheimer's disease (AD) is the most prevalent neurodegenerative disease in the growing population of elderly people. A hallmark of AD is the accumulation of plaques in the brain of AD patients. The plaques predominantly consist of aggregates of amyloid-beta (Abeta), a peptide of 39-42 amino acids generated in vivo by specific, proteolytic cleavage of the amyloid precursor protein. Recent findings however suggest that smaller oligomeric forms of Abeta, formed in parallel to the amyloid plaques, excert the predominant tissue damaging effect. Specific identification of the oligomeric forms is as a consequence of great interest. Based on a recently published technique a highly oligomer-specific antibody (mAB-M), targeting Abeta oligomers while omitting reactivity towards the monomeric and fibrillar counterpart, has been developed.
Immunogen	synthetic peptide chosen from human Abeta protein (3-10) pregion, oligomer specific
Host	Mouse
Clonality	Monoclonal
Subclass/isotype	IgG1, kappa light chain, (clone number 2D10.F6)
Purity	Affinity purified in PBS pH 7.4, no preservatives
Format	Lyophilized
Quantity	50 µg
Reconstitution	For reconstitution add 50 µl of sterile water.
Storage	For short time storage please add sodium azide and srote at +4°C. For long time storage store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.
Tested applications	Dot blot (Dot), ELISA (ELISA), Immunolocalization (IL)
Related products	AS10 932| Amyloid beta oligomer-specific monoclonal antibody (OMAB) AS10 932B | Amyloid beta oligomer-specific monoclonal antibody (OMAB), Biotinylated AS13 2715 | mAB-O oligomer-specific anti-abeta monoclonal antibody
Additional information	**Immunolocalization:** human tissue was paraffin-embedded and sectioned. De-waxed and rehydrated in an ethanol gradient. Antigens were retrieved in sodium citrate buffer (pH 6) at 95°C for 1 h. The tissue sections were separately incubated for 1 h at RT with primary antibody and antibody binding was visualized with IgG Preoxidase Reagent Kit. This antibody is specific for human Amyloid-Beta oligomers.

Application information

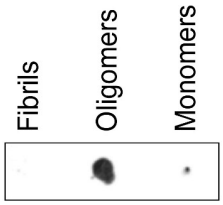
Recommended dilution	10 ug/ml (IL), 1-2 ug/ml (Dot), 2-4 ug/ml (ELISA capture)
Expected | apparent MW	4.5 kDa
Confirmed reactivity	Human
Not reactive in	No confirmed exceptions from predicted reactivity are currently known.
Additional information	Due to location of antigen used to elicit this antibody in 3-10 region, it should bind to full length APP. For high resolution images, please visit the specific product page at www.agrisera.com
Selected references	Meilandt et al. (2019). Characterization of the selective in vitro and in vivo binding properties of crenezumab to oligomeric AÃ?Â². Alzheimers Res Ther. 2019 Dec 1;11(1):97. doi: 10.1186/s13195-019-0553-5. Brännström et al. (2014). A Generic Method for Design of Oligomer-Specific Antibodies. PLoS ONE. DOI:

10.1371/journal.pone.0090857.

For high resolution images, please visit the specific product page at www.agrisera.com

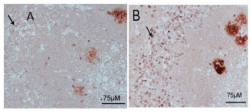
application examples

dot blot



Dot blot reaction of the binding capacity of mAB-M to fibrils, monomers and oligomers. Equal amounts of each sample were spotted on a nitrocellulose membrane and then dried. The membrane was blocked with 5% non-fat milk before incubated for 1 h with anti-mAB-M (25nM) and then with secondary antibody, anti-mouse HRP-conjugated (1:1500). The membrane was washed with PBS containing 0.25% Tween-20 before detection using ECL prime (GE Healthcare).

Immunolocalization



IHC used to illustrate the lack of binding of mAB-M to plaques. Tissue sections from the human AD hippocampus were de-waxed and rehydrated in ethanol and then incubated with AS08 357 (A) and mAB-M(B) at RT for 1h. The immunoreactivity was detected with the anti-mouse Peroxidase Reagent Kit (ImmPRESS, Vector Laboratories, Inc.) and then developed using the ImmPACT AEC Peroxidase Substrate kit (Vector Laboratories, Inc.).