

Research on Alzheimer's disease

Discover Agrisera's unique monoclonal antibodies targeting amyloid-beta oligomers. The approach is based on a combination of high avidity and cryptic epitopes, which result in high selectivity for abeta oligomers. Oligomers are also selectively detected in the presence of stoichiometric excess of abeta monomers, corresponding to more than four orders of magnitude. The approach employs a sandwich ELISA setup, where the oligomer-specific antibodies are immobilized in the bottom, followed by exposure to the sample of interest. The oligomer-specific antibodies will bind the oligomers with very high binding strength, and detection of bound abeta oligomers is subsequently performed by a normal pan antiabeta antibody. For the second step, we recommend a strong-binding polyclonal anti-abeta antibody, or biotin-labelled variants of the oligomer-specific monoclonals. All antibodies are described in detail in Brännström et al. 2014, *PLoS one: A Generic Method for Design of Oligomer-Specific Antibodies*.

Oligomer-specific antibodies

Product name
Abeta (1-42) Amyloid-beta peptide 1-42, rabbit antibodies
Abeta (1-42) Amyloid-beta peptide 1-42, rabbit antibodies
Abeta (1-42) Amyloid-beta peptide 1-42, chicken antibodies
Amyloid beta oligomer-specific monoclonal antibody (OMAB), mouse monoclonal antibodies AS10 932
Anti-Amyloid beta oligomer-specific monoclonal antibody (OMAB), Biotinylated AS10 932B
IAPP Human IAPP (amylin) 1-37 (disulphide-bridge between Cys2-Cys7), chicken antibodies AS08 359
mAB-M Mouse anti-human Abeta protein (3-10) region (clone 2D10, F6) mouse monoclonal antibodies AS13 2716
mAB-0 Mouse anti-human Abeta protein (3-10) region (clone 3E5, F8) mouse monoclonal antibodies AS13 2715

- · Monoclonal antibody developed in mouse
- IgG isotype
- Bind to amyloid-beta oligomers but not to fibrils (Fig. 1)

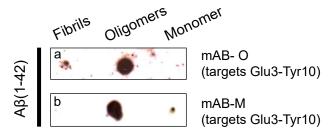


Fig. 1 Dot-blot where identical amounts of Abeta1-42; fibrils, oligomers and monomers, have been applied followed by probing of (a) mAB-O, (b) mAB-M.

Other antibodies to support Alzheimer's research

Product name Product number
Alpha-1-antichymotrypsin, goat antibodies AS10 1317
APP Delta C31 (C-terminal), rabbit antibodies
APP Amyloid Precursor Protein (N-term), rabbit antibodies
APP Amyloid Precursor Protein (C-term), rabbit antibodies
APP-C31 Caspase 3 cleaved APP, C terminal fragment, rabbit antibodies AS21 4570
BDNF Brain-derived neurotrophic factor, rabbit antibodies AS13 2691
ChAT choline O-acetyltransferase, rabbit antibodies
GLO1 Glyoxalase I (clone 6F10), rat antibodies
PEN2 gamma-secretase subunit PEN-2, rabbit antibodies AS06 154
Prealbumin TTR transthyretin, goat polyclonal antibodies
Transthyretin 39-44, amyloid specific, mouse monoclonal antibodies
Transthyretin 56-61, amyloid specific (mouse monoclonal antibody), mouse monoclonal antibodies AS16 3113
VRL-1, rabbit polyclonal antibodies AS13 2690



Detection reagents

Chemiluminescent detection

Agrisera chemiluminescent detection reagents are developed using unique chemistry with low pico to mid femtogram and extreme low femto detection levels. These reagents also offer increased stability, 24 month shelf life and superior lot-to-lot consistency at a very competitive price.

Product name Product numbe	r
Agrisera ECL kit (Bright/SuperBright) (10 ml, 100 ml, 1 L) AS16 ECL-S	N
AgriseraECL Bright (10 ml, 100 ml, 1 L)	N
AgriseraECL SuperBright (10 ml, 100 ml, 1 L)	·S

Chromogenic detection

Agrisera BCIP/NBT ALP Substrate is designed to localize ALP labeled probes on Western, Northern, Southern and Dot blots, while Agrisera BCIP/NBT Plus ALP Substrate is designed for immunohistochemical, in situ hybridization and blotting techniques. These reagents are ready-to-use, single component, give no to little background and contain non-toxic stabilizers.

Product name	Product number	r
Agrisera BCIP/NBT ALP Substrate (100 ml, 1 L)	. AS19 BCIP-NB	Τ
Agrisera BCIP/NBT Plus ALP Substrate (100 ml, 1 L)	9 BCIP-NBT-PLU	S

ELISA system detection

AgriseraELISA SuperBright is a high-quality substrate for detection of horseradish peroxidase enzyme activity at true extreme low femtogram levels, offering low background and superior signal-to-noise ratio.

The Agrisera Non Mammalian Protein Coat Block is designed to stabilize coated ELISA plates and other solid phase substrates, with reduced non-specific antibody binding and no non-specific protein interactions.

These two reagents can be ordered separately, or together, along with a HRP-conjugated secondary antibody, at a very favorable price.

Product name	Product number
Agrisera ELISA SuperBright (10 ml, 100 ml, 1 L)	AS18 ELISA-ECL
AgriCoat-Block Non mammalian Protein Coat Block (5X) (10 ml, 100 ml, 1 L) AS18	AgriCoat-Block
Agrisera ELISA Secondary/ECL/blocking set	AS19 ELISA-set



For more information on Agrisera detection reagents, please visit: www.agrisera.com/detection-reagents