



Recombinant Version of Classic Clone

Cat nr AE00321

Product Datasheet

Mouse Recombinant Antibody, rW0-2 to:

Abeta, Amyloid beta

Abeta; Abeta40; Abeta42; Amyloid beta; Amyloid β ; BetaA4 peptide; beta/A4 amyloid protein; A β peptide; β A4; A4

Cellular localization Amyloid (senile) plaques

Official Symbol (Gene) APP
GenelD 351
SwissProt P05067

Confirmed Applications ELISA, IHC, IP, WB
Positive controls Alzheimer brain, Alzheimer plasma, Alzheimer CSF, transgenic mouse model
Aeonian Rating© 100

Purification By Protein A from bioreactor concentrate

Formulation 1 mg IgG/ml in PBS with 0.02% Proclin 300

Amount 200ug 1000ug

Isotype Mouse IgG2a, kappa, recombinant version of clone W0-2

Confirmed species reactivity Human

Immunogen Abeta42-KLH fusion protein

Epitope aa5-8

Storage instructions Avoid repeated freeze/thaw cycles. For long term storage, keep small aliquots at -20C or -80C and keep one aliquot at 4C for daily experimentations. Azide will preserve antibody at 4C for 6-12 months, when kept away from direct sun light.

Expiration Integrity warranted for 24 months after purchase when handled and stored according to instructions, see below.

Warranty This product is only warranted for the specifications as described in this product sheet and only when the product is handled and stored according to instructions. User should validate this antibody in the application and tissue/cell type as required, after confirmation of integrity upon receipt is obtained by reproducing the performance as described below. Should such confirmation not be attempted, any warranty is void. In case of non-conformance, user needs to contact us immediately for replacement or refund.

Liability This product is for in vitro research use only. Any other applications, such as diagnostics or therapeutics, or in vivo experiments, and the validation of this product therein, are solely at the responsibility of the buyer/user.

Product performance see next pages

Product data:

Enzyme-Linked ImmunoSorbent Assay (ELISA):

The original clone W0-2 was successfully used to quantify Abeta in culture media and in cell lysates.
Liu H, Chu W, Gong L, Gao X, Wang W. MicroRNA-26b is upregulated in a double transgenic mouse model of Alzheimer's disease and promotes the expression of amyloid- β by targeting insulin-like growth factor 1. *Mol Med Rep.* 2016 Mar;13(3):2809-14. doi: 10.3892/mmr.2016.4860. PMID: 26847596.

ImmunoHistoChemistry (IHC):

The original clone W0-2 was successfully used to detect human Abeta spiked in rat brains.
Maleysson V, Page G, Janet T, Klein RL, Haida O, Maurin A, Richard S, Champeroux P, Fauconneau B. Relevance of electroencephalogram assessment in amyloid and tau pathology in rat. *Behav Brain Res.* 2019 Feb 1;359:127-134. doi: 10.1016/j.bbr.2018.10.026. Epub 2018 Oct 24. PMID: 30367970.

ImmunoPrecipitation (IP):

The original clone W0-2 was successfully used to extract human Abeta from transgenic mouse brains.
Pekov SI, Ivanov DG, Bugrova AE, Indeykina MI, Zakharova NV, Popov IA, Kononikhin AS, Kozin SA, Makarov AA, Nikolaev EN. Evaluation of MALDI-TOF/TOF Mass Spectrometry Approach for Quantitative Determination of Aspartate Residue Isomerization in the Amyloid- β Peptide. *J Am Soc Mass Spectrom.* 2019 Jul;30(7):1325-1329. doi: 10.1007/s13361-019-02199-2. PMID: 31073890.

Western Blot (WB):

The original clone W0-2 was successfully used to detect Abeta in human plasma and CSF.
Ida N, Hartmann T, Pantel J, Schröder J, Zerfass R, Förstl H, Sandbrink R, Masters CL, Beyreuther K. Analysis of heterogeneous A4 peptides in human cerebrospinal fluid and blood by a newly developed sensitive Western blot assay. *J Biol Chem.* 1996 Sep 13;271(37):22908-14. doi: 10.1074/jbc.271.37.22908. PMID: 8798471.

The original clone W0-2 was successfully used to detect Abeta in human brain samples in blots from 2D gels.

Sergeant N, Bombois S, Ghestem A, Drobecq H, Kostanjevecki V, Missiaen C, Wattez A, David JP, Vanmechelen E, Sergheraert C, Delacourte A. Truncated beta-amyloid peptide species in pre-clinical Alzheimer's disease as new targets for the vaccination approach. *J Neurochem.* 2003 Jun;85(6):1581-91.

W0-2 (W02)-specific most recent literature:

Choi Y, Joh Y, Ryu JS, Kim K, Seo D, Kim S. Endogenous A β peptide promote A β oligomerization tendency of spiked synthetic A β in Alzheimer's disease plasma. *Mol Cell Neurosci.* 2021 Mar;111:103588. doi: 10.1016/j.mcn.2021.103588. PMID: 33422673.

Moore Z, Mobilio F, Walker FR, Taylor JM, Crack PJ. Abrogation of type-I interferon signalling alters the microglial response to A β 1-42. *Sci Rep.* 2020 Feb 21;10(1):3153. doi: 10.1038/s41598-020-59917-0. PMID: 32081950.

Scopa C, Marrocco F, Latina V, Ruggeri F, Corvaglia V, La Regina F, Ammassari-Teule M, Middei S, Amadoro G, Meli G, Scardigli R, Cattaneo A. Impaired adult neurogenesis is an early event in Alzheimer's disease

neurodegeneration, mediated by intracellular A β oligomers. *Cell Death Differ.* 2020 Mar;27(3):934-948. doi: 10.1038/s41418-019-0409-3. Erratum in: *Cell Death Differ.* 2020 Jan 2; PMID: 31591472.

Bharadwaj PR, Martins RN. Autophagy modulates A β accumulation and formation of aggregates in yeast. *Mol Cell Neurosci.* 2020 Apr;104:103466. doi: 10.1016/j.mcn.2020.103466. PMID: 31962153.