

Anti-BACE2 [1/ 9] Bulk Size Ab00481-1.1-BT

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG1, Kappa

Clone Number: 1/ 9

Alternative Name(s) of Target: Beta-secretase 2; Aspartic-like protease; Aspartyl protease 1; Asp1; Beta-site amyloid precursor protein cleaving enzyme 2; Down syndrome aspartic protease; DRAP; Memapsin-1; Membrane-associated aspartic protease 1; theta-secretase

UniProt Accession Number of Target Protein: Q9Y5Z0

Published Application(s): WB, IHC

Published Species Reactivity: Human

Immunogen: Human BACE2 244-333.

Specificity:

Application Notes: The antibody binds specifically to BACE2, an enzyme responsible for the proteolytic cleavage of amyloid precursor protein (APP). The protein is cleaved between residues 690 and 691, leading to the formation of beta-cleaved soluble APP and a C-terminal membrane bound fragment (CTF β). The latter is then cleaved by gamma-secretase to generate amyloid beta peptide. BACE is the rate-limiting enzyme in the pathway, and is a potential target in the treatment of Alzheimer's Disease (AD), a neurodegenerative disorder characterised by amyloid beta plaques within the brain. The BACE2 protein is encoded in chromosome 21, in a region critical for the development of Down's Syndrome, and may play a role in the amyloid beta deposition in the disease.

Antibody First Published in: Banner DW, Gsell B, Benz J, Bertschinger J, Burger D, Brack S, Cuppuleri S, Debulpaep M, Gast A, Grabulovski D, Hennig M, Hilpert H, Huber W, Kuglstatter A, Kusznir E, Laeremans T, Matile H, Miscenic C, Rufer AC, Schlatter D, Steyaert J, Stihle M, Thoma R Mapping the conformational space accessible to BACE2 using surface mutants and cocrystals with Fab fragments, Fynomers and Xaperones. Acta Crystallogr D Biol Crystallogr. 2013 Jun;69(Pt 6):1124-37 [PMID:23695257](#)

Note on publication: Describes the role of BACE2 as a potential therapeutic target for the pathogenesis of diabetes and Alzheimer's Disease. Also describes the characterization of the crystal structure of BACE2 with the aid of BACE2-binding antibody Fab fragments.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.