

BACE / Asp2 (CT) antibody (pAb)

Rabbit Anti-Human/Mouse beta-Site APP Cleaving Enzyme

Instruction Manual

Catalog Number	PK-AB718-2253
Synonyms	BACE Antibody: Asp
Description	Accumulation of the amyloid- β ($A\beta$) plaque in the cerebral cortex is a critical event in the pathogenesis of Alzheimer's disease. $A\beta$ peptide is generated by proteolytic cleavage of the β -amyloid protein precursor (APP) at β - and γ -sites by two proteases. APP is first cleaved by β -secretase, producing a soluble derivative of the protein and a membrane anchored 99-amino acid carboxy-terminal fragment (C99). The C99 fragment serves as substrate for γ -secretase to generate the 4 kDa amyloid- β peptide, which is deposited in the brains of all suffers of Alzheimer's disease. The long-sought β -secretase was recently identified by several groups independently and designated β -site APP cleaving enzyme (BACE) and aspartyl protease 2 (Asp2). BACE/Asp2 is a novel transmembrane aspartic protease and colocalizes with APP.
Quantity	100 μ g
Source / Host	Rabbit
Immunogen	Rabbit polyclonal BACE antibody was raised against a peptide corresponding to 17 amino acids at the carboxy terminus of human BACE .
Purification Method	Ion exchange chromatography purified.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μ l or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, ICC INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually. BACE can be used for detection of BACE by Western blot at 1 μ g/mL. An approximately 70 kDa band should be detected. Antibody can also be used for immunocytochemistry starting at 10 μ g/mL.
Images	Available upon request.
References	Vassar R, et al. β -secretase cleavage of Alzheimer's amyloid precursor protein by the transmembrane aspartic protease BACE. Science 1999;286:735-41 Hussain I, et al. Identification of a novel aspartic protease (Asp 2) as β -secretase. Mol Cell Neurosci 1999;14:419-27 Sinha S, et al. Purification and cloning of amyloid precursor protein β -secretase from human brain. Nature 1999;402:537-40 Yan R, et al. Membrane-anchored aspartyl protease with Alzheimer's disease β -secretase activity. Nature 1999;402:533-7
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-2253P Human brain Tissue Lysate, Cat. No. PK-AB718-1303 BACE2 Antibody (CT), Cat. No. PK-AB718-2249 APP Antibody (CT), Cat. No. PK-AB718-2236

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