

Rabbit anti-Mouse BACE1 Polyclonal Antibody | anti-BACE1 antibody

Anti-BACE1 Antibody, Rabbit Polyclonal

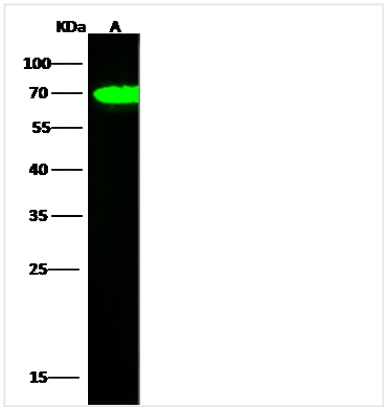
CATALOG # AAA257799	HOST Rabbit	REACTIVITY Mouse	APPLICATIONS Immunohistochemistry, ELISA, Western Blot
-------------------------------	-----------------------	----------------------------	--

PRODUCT SYNONYMS

BACE1; Polyclonal Antibody; Anti-BACE1 Antibody; Rabbit Polyclonal; BACE1 Antibody; Rabbit PAb; Antigen Affinity Purified; Anti-C76936 Antibody; beta-site APP-cleaving enzyme 1; anti-BACE1 antibody

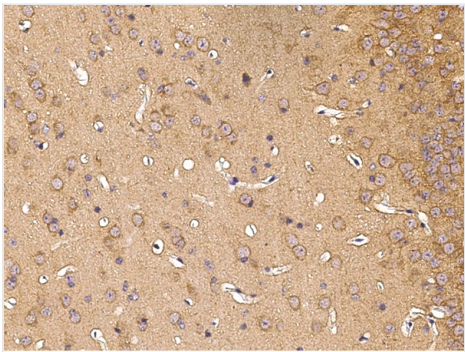
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Mouse BACE1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid. 0.2um filtered solution in PBS
Applicable Applications for anti-BACE1 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Mouse BACE1 Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Mouse BACE1 (rM BACE1; NP_035922.4; Met1-Thr457). BACE1 specific IgG was purified by Mouse BACE1 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.



WB (Western Blot)

Anti-BACE1 rabbit polyclonal antibody at 1:500 dilution. Lane A: Mouse brain tissue lysate. Lysates/proteins at 30 ug per lane. Secondary Goat Anti- Rabbit IgG H&L (Dylight 800) at 1/10000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 56 kDa. Observed band size: 70 kDa.



IHC (Immunohistochemistry)

Immunochemical staining of mouse BACE1 in mouse brain with rabbit polyclonal antibody (1:1000, formalin-fixed paraffin embedded sections).

ADDITIONAL INFORMATION

Related Product Information for anti-BACE1 antibody	Background: Beta-site APP-cleaving enzyme 1 (BACE1) is an aspartic-acid protease important in the formation of myelin sheaths in peripheral nerve cells. In the brain, This protein is expressed highly in the substantia nigra, locus coruleus and medulla oblongata. Strong BACE1 expression has also been described in pancreatic tissue. BACE1 has a pivotal role in the pathogenesis of Alzheimer's disease. In Alzheimer's disease patients, BACE1 levels were elevated although mRNA levels were not changed. It has been found that BACE1 gene expression is controlled by a TATA-less promoter. The translational repression as a new mechanism controlling its expression. And the low concentrations of Ca(2+)(microM range) significantly increased the proteolytic activity of BACE1. Furthermore, BACE1 protein is ubiquitinated, and the degradation of BACE1 proteins and amyloid precursor protein processing are regulated by the ubiquitin-proteasome pathway. It has also been identified as the rate limiting enzyme for amyloid-beta-peptide (Abeta) production.
References	Christensen MA, et al. (2004) Transcriptional regulation of BACE1, the beta-amyloid precursor protein beta-secretase, by Sp1. Mol Cell Biol. 24(2):865-74. Stockley JH, et al. (2007) The proteins BACE1 and BACE2 and beta-secretase activity in normal and Alzheimer's disease brain. Biochem Soc Trans. 35(Pt 3): 574-6. Savonenko AV, et al. (2008) Alteration of BACE1-dependent NRG1/ErbB4 signaling and schizophrenia-like phenotypes in BACE1-null mice. Proc Natl Acad Sci U S A. 105(14): 5585-90. Hayley M, et al. (2009) Calcium enhances the proteolytic activity of BACE1: An in vitro biophysical and biochemical characterization of the BACE1-calcium interaction. Biochim Biophys Acta. 1788(9): 1933-8.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.