

## BACE antibody

<b>Catalog No.:</b>	15-288-21081
<b>Quantity:</b>	0.1 mg
<b>Background:</b>	<p>Amyloid beta peptide is the major constituent of amyloid plaques in the brains of individuals afflicted with Alzheimer's disease. This peptide is generated from the beta-amyloid precursor protein (beta APP) in a two-step process. The first step involves cleavage of the extracellular, amino-terminal domain of beta APP. Protein cleavage is performed by an aspartyl protease termed beta-secretase (BACE), of which there are two isoforms, BACE1 and 2. This enzyme is synthesized as a propeptide that must be modified to the mature and active form by the prohormone convertase, furin. Beta APP cleavage by the mature form of BACE results in the cellular secretion of a segment of beta APP and a membrane-bound remnant. This remnant is then processed by another protease termed gamma-secretase. Gamma-secretase cleaves an intra-membrane site in the carboxyl-terminal domain of beta APP, thus generating the amyloid beta peptide. Gamma-secretase is believed to be a multi-subunit complex containing presenilin-1 and 2 as central components. Found associated with the presenilins is the transmembrane glycoprotein nicastrin. Nicastrin has been found to bind to the carboxyl-terminus of beta APP and helps to modulate the production of the amyloid beta peptide. Also found in the neurofibrillary lesions associated with Alzheimer's disease is a protein termed Tau. Tau is a neuronal microtubule-associated protein found predominantly on axons. Tau functions to promote tubulin polymerization and stabilize microtubules. Tau, in its hyperphosphorylated form, is the major constituent of paired helical filaments (PHF), which are the building block of neurofibrillary lesions found in brain tissue of Alzheimer's diseased patients.</p>
<b>Host / Isotype:</b>	Chicken
<b>Immunogen:</b>	Synthetic peptide: CLRQQHDDFADDISLLK, corresponding to amino acids 458-501 of Human BACE.
<b>Format:</b>	<b>State:</b> Liquid <b>Purification:</b> Whole antiserum <b>Buffer System:</b> Contains 0.09% sodium azide
<b>Applications:</b>	IHC-P Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	Mouse (94% identity with immunogen) and rat (94% identity with immunogen) due to sequence homology - Not tested in other species

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Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

**Storage:**

Keep as concentrated solution. Store at 4

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