

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human BACE-2 Ectodomain in direct ELISAs. In direct ELISAs, less than 10% cross-reactivity with recombinant mouse BACE-2 is observed and no cross-reactivity with recombinant human (rh) BACE, rhCathepsin D, or rhCathepsin E
Source	Monoclonal Rat IgG _{2A} Clone # 391017
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human BACE-2 Ala21-Tyr473 Accession # Q9Y5Z0
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

BACE-2 (β-site APP cleaving enzyme 2; also Asp-1 and Memapsin-1) is a 73-75 kDa member of the peptidase A1 family. It is expressed both in- and outside the CNS, and is classified as a Golgi aspartyl protease. Its status as a β-secretase is unclear; if it has physiological activity, it may be associated with glia. Mature BACE-2 is a 456 amino acid (aa) type I transmembrane glycoprotein. It contains a 411 aa extracellular domain (aa 63-473) that has two catalytic residues (Asp93 and Asp289). Two potential splice forms exist; one shows a deletion of aa 329-378, while a second shows an 18 aa substitution for aa 380-518. Over aa 63-466, human BACE-2 shares 92% aa sequence identity with mouse BACE-2.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.