



Biotinylated Anti-human BACE-2 Antibody

ORDERING INFORMATION

Catalog Number: BAF4097

Lot Number: ZGH01

Size: 50 µg

Formulation: 0.2 µm filtered solution in PBS with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human BACE-2

Immunogen: NS0-derived rhBACE-2 (aa 63 - 466)

Ig Type: sheep IgG

Application: Western blot

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 inside 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 (Asp 93 and Asp 289). Two potential splice forms exist; one shows a deletion of aa's 329 - 378, while a second shows an 18 aa substitution for aa's 380 - 518. Over aa 63 - 466, human BACE-2 shares 92% aa sequence identity with mouse BACE-2.

Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human BACE-2 (rhBACE-2; aa 63 - 466; Accession # Q94520). Human BACE-2 specific IgG was purified by human BACE-2 affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use as a detection antibody in human BACE-2 Western blots.

Application

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human and mouse BACE-2. The detection limit for BACE-2 is approximately 5 ng/lane and 25 ng/lane under non-reducing and reducing conditions, respectively. In this format, this antibody shows less than 1% cross-reactivity with rhBACE-1, rhCathepsin D and rhCathepsin E.

Optimal dilutions should be determined by each laboratory for each application.