

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human and mouse BACE-2 Ectodomain in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) BACE-1, rhCathepsin D, and rhCathepsin E is observed. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human BACE-2 Ectodomain Gly63-Pro466 Accession # Q9Y5Z0 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

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.

| | Recommended Concentration | Sample |
|----------------------------|----------------------------------|---|
| Western Blot | 0.1 µg/mL | Recombinant Human BACE-2 Recombinant Mouse BACE-2 (Catalog # 2977-BA) |
| Immunoprecipitation | 25 µg/mL | Conditioned cell culture medium spiked with Recombinant Human BACE-2, see our available Western blot detection antibodies |

PREPARATION AND STORAGE

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| Reconstitution | Reconstitute at 0.2 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

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 (Asp93 and Asp289). 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.