

DESCRIPTION

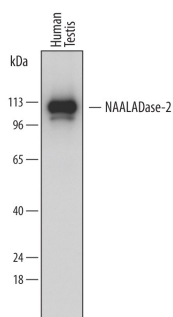
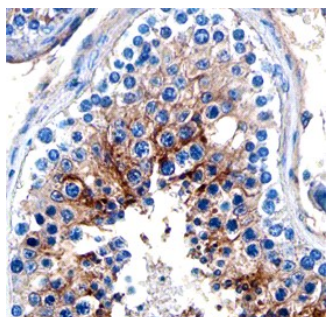
Species Reactivity	Human
Specificity	Detects human NAALADase-2/NAALAD2 in direct ELISAs. In direct ELISAs, approximately 50% cross-reactivity with recombinant mouse NAALADase-2 is observed and no cross-reactivity with recombinant human (rh) PSMA/FOLH1/NAALADase-1, rhNAALADase-like 2, or rhNAALADase-like 1 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 756030
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human NAALADase-2/NAALAD2 Lys32-Leu740 Accession # Q9Y3Q0
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 either lyophilized or 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	0.5 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human NAALADase-2/NAALAD2 by Western Blot. Western blot shows lysates of human testis tissue. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human NAALADase-2/NAALAD2 Monoclonal Antibody (Catalog # MAB7658) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for NAALADase-2/NAALAD2 at approximately 110 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>NAALADase-2/NAALAD2 in Human Testis. NAALADase-2/NAALAD2 was detected in immersion fixed paraffin-embedded sections of human testis using Mouse Anti-Human NAALADase-2/NAALAD2 Monoclonal Antibody (Catalog # MAB7658) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membranes of spermatocytes. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

N-acetylated-alpha-linked acidic dipeptidase 2 (NAALADase-2), also known as glutamate carboxypeptidase 3 (GCP3), is a 90-100 kDa type 2 transmembrane protein in the M28 peptidase family. It hydrolyzes beta-citrylglutamate (BCG) and N-acetyl-aspartylglutamate (NAAG) which are abundant dipeptides found in brain and testis. Mature human NAALADase-2 consists of a 7 amino acid (aa) cytoplasmic domain, a 24 aa transmembrane segment, and a 709 aa extracellular region (aa 32-740) that contains the peptidase domain. Over aa 32-740, human NAALADase-2 shares 89% aa sequence identity with mouse NAALADase-2.