

DESCRIPTION

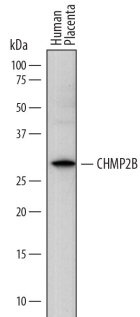
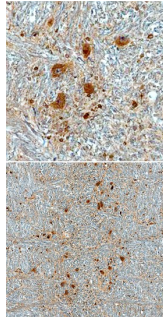
Species Reactivity	Human
Specificity	Detects human CHMP2B in direct ELISAs and Western blots
Source	Monoclonal Mouse IgG _{2B} Clone # 791521
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human CHMP2B Ala2-Asp213 Accession # Q9UQN3
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	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human CHMP2B by Western Blot. Western blot shows lysates of human placenta tissue. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human CHMP2B Monoclonal Antibody (Catalog # MAB7509) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for CHMP2B at approximately 30 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>CHMP2B in Human Brain. CHMP2B was detected in immersion fixed paraffin-embedded sections of human brain (medulla) using Mouse Anti-Human CHMP2B Monoclonal Antibody (Catalog # MAB7509) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Staining is shown at both high (upper panel) and low (lower panel) magnification, and specific staining was localized to neuronal cytoplasm. 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

CHMP2B (CHarged Multivesicular body Protein 2B; also Chromatin-Modifying Protein 2B and Vps2-2) is an approximately 35 kDa member of the SNF family of proteins. It is a cytosolic molecule that interacts with VPS4 and undergoes polymerization to form tubules that project plasma membrane outward, generating an environment conducive to membrane fission and budding. It also appears to participate in the formation of intraluminal vesicles associated with the lysosomal system. CHMP2B is found in striated muscle (heart and skeletal), and particularly in neurons of the CNS. Human CHMP2B is 213 amino acids (aa) in length. It contains one coiled-coil region (aa 25-55), an MIT (microtubule-interacting and trafficking) domain (aa 201-211) and a utilized phosphorylation site at Ser199. There is one alternative splice form that shows a deletion of aa 2-42. Full-length human CHMP2B shares 99% aa identity with mouse CHMP2B, but only 33% aa identity with human CHMP2A.