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KD-Validated Anti-CHMP2B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1146

Specification

KD-Validated Anti-CHMP2B Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q9UQN3
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 24 kDa , observed, 28 kDa KDa**
Gene Name	**CHMP2B**
Aliases	**CHMP2B; Charged Multivesicular Body Protein 2B; CHMP2.5; VPS2B; Charged Multivesicular Body Protein 2b; Chromatin Modifying Protein 2B; DKFZP564O123; Vacuolar Protein-Sorting-Associated Protein 2-2; Vacuolar Protein Sorting-Associated Protein 2-2; VPS2 Homolog B (S. Cerevisiae); Chromatin-Modifying Protein 2b; VPS2 Homolog B; FTDALS7; HVps2-2; VPS2-2; CHMP2b; Vps2-2; ALS17; DMT1**
Immunogen	**A synthesized peptide derived from CHMP2B**

KD-Validated Anti-CHMP2B Rabbit Monoclonal Antibody - Additional Information

Gene ID	**25978**

Other Names
Charged multivesicular body protein 2b, CHMP2.5, Chromatin-modifying protein 2b, CHMP2b, Vacuolar protein sorting-associated protein 2-2, Vps2-2, hVps2-2, CHMP2B

KD-Validated Anti-CHMP2B Rabbit Monoclonal Antibody - Protein Information

Name CHMP2B

Function
Probable core component of the endosomal sorting required for transport complex III (ESCRT-III) which is involved in multivesicular bodies (MVBs) formation and sorting of endosomal cargo proteins into MVBs. MVBs contain intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome and mostly are delivered to lysosomes enabling degradation of membrane proteins, such as stimulated growth factor receptors, lysosomal enzymes and lipids. The MVB pathway appears to require the sequential function of ESCRT-O, -I,-II and -III complexes. ESCRT-III proteins mostly dissociate from the invaginating membrane before the ILV is released. The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis and the budding of

enveloped viruses (HIV-1 and other lentiviruses). ESCRT-III proteins are believed to mediate the necessary vesicle extrusion and/or membrane fission activities, possibly in conjunction with the AAA ATPase VPS4.

Cellular Location
Cytoplasm, cytosol. Late endosome membrane; Peripheral membrane protein

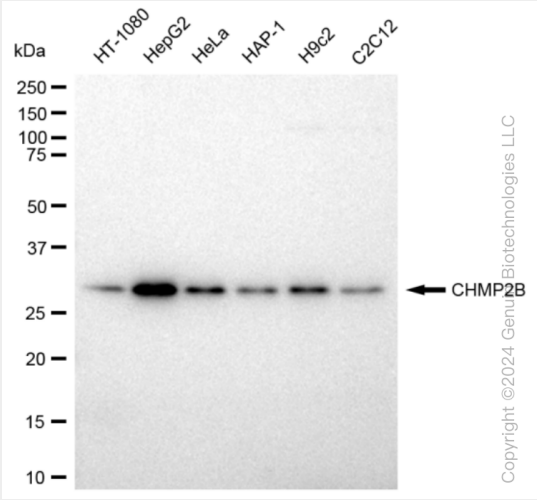
Tissue Location
Widely expressed. Expressed in brain, heart, skeletal muscle, spleen, kidney, liver, small intestine, pancreas, lung, placenta and leukocytes. In brain, it is expressed in cerebellum, cerebral cortex, medulla, spinal cord, occipital lobe, frontal lobe, temporal lobe and putamen.

KD-Validated Anti-CHMP2B Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-CHMP2B Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-CHMP2B antibody (Cat#AGI1146). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CHMP2B antibody (Cat#AGI1146, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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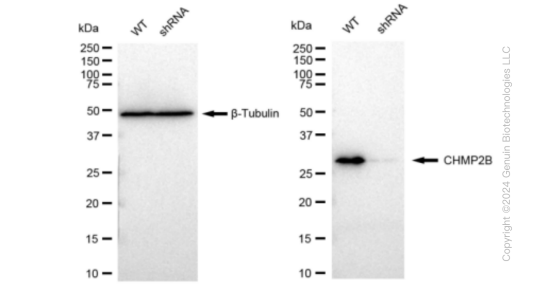
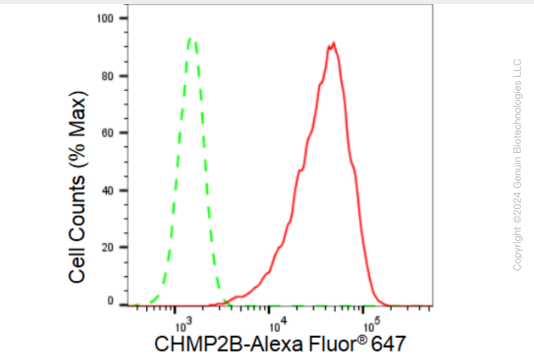
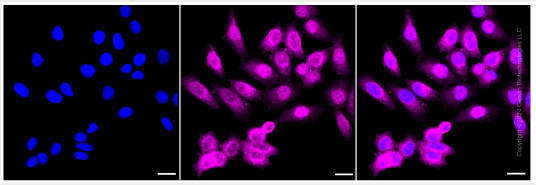


Western blotting analysis using anti-CHMP2B antibody (Cat#AGI1146). CHMP2B expression in wild type (WT) and CHMP2B shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-CHMP2B antibody (Cat#AGI1146, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of CHMP2B expression in HepG2 cells using CHMP2B antibody (Cat#AGI1146, 1:2,000). Green, isotype control; red, CHMP2B.



Immunocytochemical staining of HepG2 cells with CHMP2B antibody (Cat#AGI1146, 1:1,000). Nuclei were stained blue with DAPI; CHMP2B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.