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KD-Validated Anti-CHMP5 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2018

Specification

KD-Validated Anti-CHMP5 Mouse Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q9NZZ3
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**Predicted, 25 kDa, observed, 30 kDa KDa**
Gene Name	**CHMP5**
Aliases	**CHMP5; Charged Multivesicular Body Protein 5; Vps60; HSPC177; C9orf83; SNF7DC2; CGI-34; Vacuolar Protein Sorting-Associated Protein 60; SNF7 Domain-Containing Protein; Chromatin-Modifying Protein 5; HVps60; Chromosome 9 Open Reading Frame 83; Apoptosis-Related Protein PNAS-2; Chromatin Modifying Protein 5; SNF7 Domain Containing; PNAS-2**
Immunogen	**Recombinant protein of human CHMP5**

KD-Validated Anti-CHMP5 Mouse Monoclonal Antibody - Additional Information

Gene ID	**51510**

Other Names
Charged multivesicular body protein 5, Chromatin-modifying protein 5, SNF7 domain-containing protein 2, Vacuolar protein sorting-associated protein 60, Vps60, hVps60, CHMP5, C9orf83, SNF7DC2

KD-Validated Anti-CHMP5 Mouse Monoclonal Antibody - Protein Information

Name CHMP5

Synonyms C9orf83, SNF7DC2

Function
Probable peripherally associated 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) (PubMed:14519844). ESCRT-III proteins are believed to mediate the necessary vesicle extrusion and/or membrane fission activities, possibly in conjunction with the AAA ATPase VPS4. Involved in HIV-1 p6- and p9-dependent virus release (PubMed:14519844).

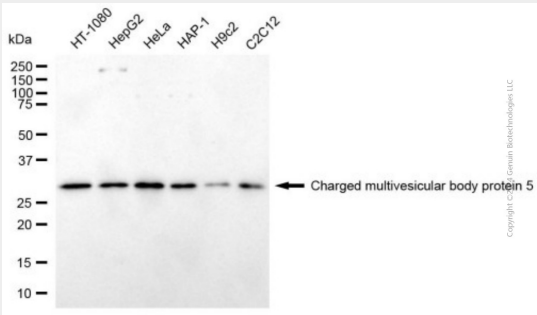
Cellular Location
Cytoplasm, cytosol. Endosome membrane; Peripheral membrane protein. Midbody. Note=Localizes to the midbody of dividing cells (PubMed:17853893). Localized in two distinct rings on either side of the Flemming body (PubMed:17853893)

KD-Validated Anti-CHMP5 Mouse Monoclonal Antibody - Protocols

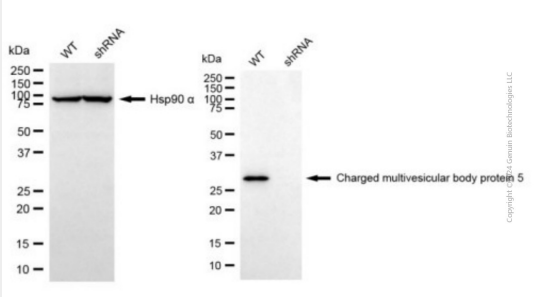
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-CHMP5 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-charged multivesicular body protein 5 antibody (Cat#AGI2018). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-charged multivesicular body protein 5 antibody (Cat#AGI2018, 1:1,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-charged multivesicular body protein 5 antibody

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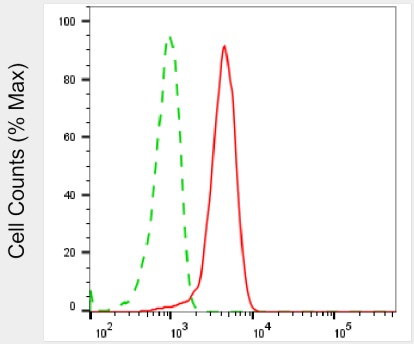
(Cat#AGI2018). Charged multivesicular body protein 5 expression in wild-type (WT) and charged multivesicular body protein 5 (CHMP5) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-charged multivesicular body protein 5 antibody (Cat#AGI2018, 1:1,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Charged multivesicular body protein 5-Alexa Fluor® 647

Flow cytometric analysis of Charged multivesicular body protein 5 expression in HepG2 cells using anti-Charged multivesicular body protein 5 antibody (Cat#AGI2018, 1:1,000). Green, isotype control; red, Charged multivesicular body protein 5.