

Goat Anti-CHMP5 Antibody

Peptide-affinity purified goat antibody Catalog # AF1237a

Specification

Goat Anti-CHMP5 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>Q9NZZ3</u> <u>NP_057494</u>, <u>51510</u> Human Mouse, Rat Goat Polyclonal 100ug/200ul IgG 24571

Goat Anti-CHMP5 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

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-CHMP5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CHMP5 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)

Goat Anti-CHMP5 Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-CHMP5 Antibody - Images



AF1237a (x μ g/ml) staining of K562 lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CHMP5 Antibody - Background



CHMP5 belongs to the chromatin-modifying protein/charged multivesicular body protein (CHMP) family. These proteins are components of ESCRT-III (endosomal sorting complex required for transport III), a complex involved in degradation of surface receptor proteins and formation of endocytic multivesicular bodies (MVBs). Some CHMPs have both nuclear and cytoplasmic/vesicular distributions, and one such CHMP, CHMP1A (MIM 164010), is required for both MVB formation and regulation of cell cycle progression (Tsang et al., 2006 [PubMed 16730941]).

Goat Anti-CHMP5 Antibody - References

[Expression spectra of apoptosis-related gene pnas-2] Wang HR, et al. Zhongguo Shi Yan Xue Ye Xue Za Zhi, 2008 Apr. PMID 18426649.

PNAS-2: a novel gene probably participating in leukemogenesis. Wang HR, et al. Oncology, 2006. PMID 17855796.

The MIT domain of UBPY constitutes a CHMP binding and endosomal localization signal required for efficient epidermal growth factor receptor degradation. Row PE, et al. J Biol Chem, 2007 Oct 19. PMID 17711858.

[Correlation between expression of apoptosis-related gene pnas-2 and leukemia] Huang HH, et al. Zhongguo Shi Yan Xue Ye Xue Za Zhi, 2007 Aug. PMID 17708794.

Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.