

CHMP2A Rabbit pAb

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Catalog # AP55340

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	O43633
Predicted	Rat, Dog, Human, Mouse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25104
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CHMP2A
Epitope Specificity	1-100/222
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Late endosome membrane. Localizes to the midbody of dividing cells. Localized in two distinct rings on either side of the Fleming body.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CHMP2A 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]).[supplied by OMIM, Mar 2008]

Additional Information

Gene ID	27243
Other Names	Charged multivesicular body protein 2a, Chromatin-modifying protein 2a, CHMP2a, Putative breast adenocarcinoma marker BC-2, Vacuolar protein sorting-associated protein 2-1, Vps2-1, hVps2-1, CHMP2A, BC2, CHMP2
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CHMP2A
Synonyms	BC2, CHMP2
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 (PubMed:21310966). Together with SPAST, the ESCRT-III complex promotes nuclear envelope sealing and mitotic spindle disassembly during late anaphase (PubMed:26040712). Recruited to the reforming nuclear envelope (NE) during anaphase by LEMD2 (PubMed:28242692). 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	Late endosome membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus envelope. Note=Localizes to the midbody of dividing cells. Localized in two distinct rings on either side of the Fleming body. Localizes to the reforming nuclear envelope on chromatin disks during late anaphase (PubMed:28242692)

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.