



Rabbit Anti-CHMP2A antibody

SL13913R

Product Name:	CHMP2A
Chinese Name:	乳腺癌MarkerCHMP2A抗体
Alias:	BC2; Charged multivesicular body protein 2a; CHM2A_HUMAN; CHMP2; CHMP2a; Chromatin modifying protein 2a; Chromatin-modifying protein 2a; hVps2 1; hVps2-1; putative breast adenocarcinoma marker; Putative breast adenocarcinoma marker BC-2; Putative breast adenocarcinoma marker BC2; Vacuolar protein sorting associated protein 2 1; Vacuolar protein sorting-associated protein 2-1; Vps2 1; VPS2; Vps2-1; VPS2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	25kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CHMP2A:1-100/222
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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]

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. Involved in HIV-1 p6- and p9-dependent virus release.

Subunit:

Probable core component of the endosomal sorting required for transport complex III (ESCRT-III). ESCRT-III components are thought to multimerize to form a flat lattice on the perimeter membrane of the endosome. Several assembly forms of ESCRT-III may exist that interact and act sequentially. In vitro, heteromerizes with CHMP3 (but not CHMP4) to form helical tubular structures that expose membrane-interacting sites on the outside whereas VPS4B can associate on the inside of the tubule. Interacts with CHMP1B, CHMP2B, CHMP3, CHMP4A, CHMP4B, CHMP4C and CHMP5. Interacts with VPS4A; the interaction is direct. Interacts with VPS4B; the interaction is direct. Interacts with MITD1. Interacts with VTA1; the interaction probably involves the open conformation of CHMP2A.

Subcellular Location:

Late endosome membrane. Localizes to the midbody of dividing cells. Localized in two distinct rings on either side of the Fleming body.

Post-translational modifications:

ISGylated in a CHMP5-dependent manner. Isgylation weakens and inhibits its interactions with VPS4A and VTA1 respectively.

Similarity:

Belongs to the SNF7 family.

SWISS:
O43633

Gene ID:
27243

Database links:

[Entrez Gene: 27243](#) Human

[Entrez Gene: 68953](#) Mouse

[Entrez Gene: 365191](#) Rat

[Omim: 610893](#) Human

[SwissProt: O43633](#) Human

[SwissProt: Q9DB34](#) Mouse

[Unigene: 12107](#) Human

[Unigene: 295670](#) Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.