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Rabbit Anti-CHMP2B antibody

SL11712R

Product Name:	CHMP2B
Chinese Name:	染色质修饰蛋白2B抗体
Alias:	Charged multivesicular body protein 2b; CHM2B_HUMAN; CHMP2.5; CHMP2b; Chromatin modifying protein 2b; Chromatin-modifying protein 2b; DMT1; hVps2-2; Vacuolar protein sorting 2-2; VPS2 homolog B; Vacuolar protein sorting-associated protein 2-2; Vps2-2; VPS2B.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	ELISA=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:	24kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CHMP2B:31-120/213
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:	The charged multivesicular body proteins, commonly designated CHMPs, belong to the vacuolar sorting protein family and function as chromatin-modifying proteins. CHMP1-6 are all components of ESCRT (endosomal sorting complex required for transport) I, II or III complexes. These complexes are crucial for sorting endosomal articles into

multivesicular bodies (MVBs), and are also required for the formation of these bodies. CHMP2B, also known as CHMP2.5 or vacuolar protein-sorting-associated protein 2-2, is a 213 amino acid cytosolic protein. Widely expressed in brain, heart, skeletal muscle, small intestine, pancreas, lung, placenta and leukocytes, CHMP2B associates directly with CHMP2A and vps4 for the disassembly of the ESCRT-III complex. Defects in the gene encoding CHMP2B have been shown to cause chromosome 3-linked frontotemporal dementia (FTD3).

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.

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. Interacts with CHMP2A. Interacts with VPS4A. Interacts with VPS4B; the interaction is direct.

Subcellular Location:
Cytoplasm

Tissue Specificity:
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 chord, occipital lobe, frontal lobe, temporal lobe and putamen.

DISEASE:
Defects in CHMP2B are the cause of frontotemporal dementia, chromosome 3-linked (FTD3) [MIM:600795]. FTD3 is characterized by an onset of dementia in the late 50's initially characterized by behavioral and personality changes including apathy, restlessness, disinhibition and hyperorality, progressing to stereotyped behaviors, non-fluent aphasia, mutism and dystonia, with a marked lack of insight. The brains of individuals with FTD3 have no distinctive neuropathological features. They show global

	cortical and central atrophy, but no beta-amyloid deposits. **Similarity:** Belongs to the SNF7 family. **SWISS:** Q9UQN3 **Gene ID:** 25978 **Database links:** Entrez Gene: 25978Human Entrez Gene: 68942Mouse Omim: 609512Human SwissProt: Q9UQN3Human SwissProt: Q8BJF9Mouse Unigene: 476930Human Unigene: 432944Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.