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PICALM / CALM Antibody
Rabbit Polyclonal Antibody
Catalog # ALS16912

Specification

PICALM / CALM Antibody - Product Information

Application	**IHC, WB**
Primary Accession	Q13492
Other Accession	8301
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**70755**

PICALM / CALM Antibody - Additional Information

Gene ID 8301

Other Names
PICALM, CALM, LAP, CLTH

Target/Specificity
Human PICALM

Reconstitution & Storage
PBS, pH 7, 1% BSA, 20% Glycerol, 0.01% Thimerosal. Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Precautions
PICALM / CALM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PICALM / CALM Antibody - Protein Information

Name PICALM

Synonyms CALM

Function
Cytoplasmic adapter protein that plays a critical role in clathrin-mediated endocytosis which is important in processes such as internalization of cell receptors, synaptic transmission or removal of apoptotic cells. Recruits AP-2 and attaches clathrin triskelions to the cytoplasmic side of plasma membrane leading to clathrin-coated vesicles (CCVs) assembly (PubMed:10436022, PubMed:16262731, PubMed:27574975). Furthermore, regulates clathrin-coated vesicle size and maturation by directly sensing and driving membrane

curvature (PubMed:25898166). In addition to binding to clathrin, mediates the endocytosis of small R- SNARES (Soluble NSF Attachment Protein REceptors) between plasma membranes and endosomes including VAMP2, VAMP3, VAMP4, VAMP7 or VAMP8 (PubMed:22118466, PubMed:21808019, PubMed:23741335). In turn, PICALM- dependent SNARE endocytosis is required for the formation and maturation of autophagic precursors (PubMed:25241929). Modulates thereby autophagy and the turnover of autophagy substrates such as MAPT/TAU or amyloid precursor protein cleaved C-terminal fragment (APP- CTF) (PubMed:25241929, PubMed:24067654).

Cellular Location
Cell membrane. Membrane, clathrin-coated pit. Golgi apparatus. Cytoplasmic vesicle, clathrin-coated vesicle. Nucleus. Note=Colocalized with clathrin in the Golgi area (PubMed:10436022). Interaction with PIMREG may target PICALM to the nucleus in some cells (PubMed:16491119)

Tissue Location
Expressed in all tissues examined.

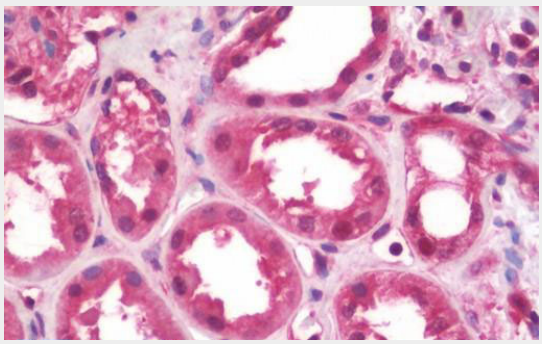
Volume
50 µl

PICALM / CALM Antibody - Protocols

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

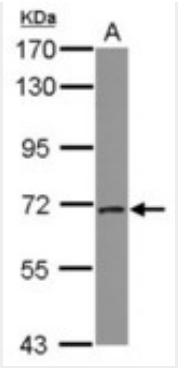
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PICALM / CALM Antibody - Images



Anti-PICALM / CALM antibody IHC staining of human kidney.

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Sample (30 ug of whole cell lysate) A: A549 7.5% SDS PAGE PICALM antibody diluted at 1:2000

PICALM / CALM Antibody - Background

Assembly protein recruiting clathrin and adapter protein complex 2 (AP2) to cell membranes at sites of coated-pit formation and clathrin-vesicle assembly. May be required to determine the amount of membrane to be recycled, possibly by regulating the size of the clathrin cage. Involved in AP2-dependent clathrin-mediated endocytosis at the neuromuscular junction.

PICALM / CALM Antibody - References

Dreyling M.H.,et al.Proc. Natl. Acad. Sci. U.S.A. 93:4804-4809(1996).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Nakajima D.,et al.Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.
Taylor T.D.,et al.Nature 440:497-500(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.