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PICALM Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21487c

Specification

PICALM Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q13492
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**70755**

PICALM Antibody (Center) - Additional Information

Gene ID 8301

Other Names
Phosphatidylinositol-binding clathrin assembly protein, Clathrin assembly lymphoid myeloid leukemia protein, PICALM, CALM

Target/Specificity
This PICALM antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 385-415 amino acids from the Central region of human PICALM.

Dilution
WB~~1:2000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Precautions
PICALM Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PICALM Antibody (Center) - 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:21808019, PubMed:22118466, 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:24067654, PubMed:25241929).

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)

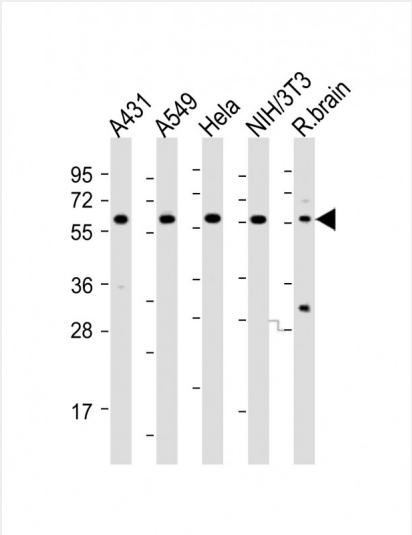
Tissue Location
Expressed in all tissues examined.

PICALM Antibody (Center) - 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 Antibody (Center) - Images



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All lanes : Anti-PICALM Antibody (Center) at 1:2000 dilution Lane 1: A431 whole cell lysates Lane 2: A549 whole cell lysates Lane 3: Hela whole cell lysates Lane 4: NIH/3T3 whole cell lysates Lane 5: rat brain lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 69 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

PICALM Antibody (Center) - 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 Antibody (Center) - 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.