

## **PICALM Antibody (C-Term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21881b

## **Specification**

## PICALM Antibody (C-Term) - Product Information

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

## PICALM Antibody (C-Term) - 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 512-543 amino acids from 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 (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## PICALM Antibody (C-Term) - 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**

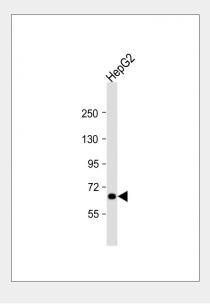
Expressed in all tissues examined.

# PICALM Antibody (C-Term) - 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 (C-Term) - Images





Anti-PICALM Antibody (C-Term) at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 71 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## PICALM Antibody (C-Term) - 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 (C-Term) - 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.