

PICALM / CALM Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13801**Specification**

PICALM / CALM Antibody (N-Terminus) - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q13492
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	71kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 E~~N/A

PICALM / CALM Antibody (N-Terminus) - Additional Information**Gene ID** 8301**Other Names**

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

Target/Specificity

Human PICALM

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

PICALM / CALM Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

PICALM / CALM Antibody (N-Terminus) - 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:16262731, PubMed:16262731).

[27574975](http://www.uniprot.org/citations/27574975)). Furthermore, regulates clathrin-coated vesicle size and maturation by directly sensing and driving membrane curvature (PubMed: [25898166](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/21808019), PubMed: [22118466](http://www.uniprot.org/citations/22118466), PubMed: [23741335](http://www.uniprot.org/citations/23741335)). In turn, PICALM- dependent SNARE endocytosis is required for the formation and maturation of autophagic precursors (PubMed: [25241929](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/24067654), PubMed: [25241929](http://www.uniprot.org/citations/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

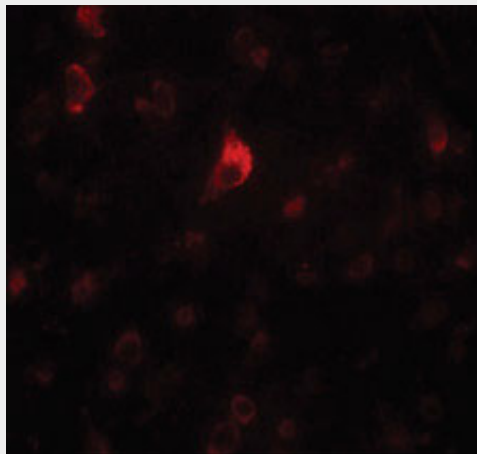
Expressed in all tissues examined.

PICALM / CALM Antibody (N-Terminus) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PICALM / CALM Antibody (N-Terminus) - Images



Immunofluorescence of PICALM in human brain tissue with PICALM antibody at 20 ug/ml.

PICALM / CALM Antibody (N-Terminus) - 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 (N-Terminus) - 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.