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KD-Validated Anti-PICALM Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1696

Specification

KD-Validated Anti-PICALM Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q13492
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 71 kDa , observed, 71,69,66 kDa KDa**
Gene Name	**PICALM**
Aliases	**Phosphatidylinositol Binding Clathrin Assembly Protein; CALM; CLTH; Phosphatidylinositol-Binding Clathrin Assembly Protein; Clathrin Assembly Lymphoid Myeloid Leukemia Protein; LAP**
Immunogen	**A synthesized peptide derived from human PICALM**

KD-Validated Anti-PICALM Rabbit Monoclonal Antibody - Additional Information

Gene ID	**8301**

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

KD-Validated Anti-PICALM Rabbit Monoclonal 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:<a

href="http://www.uniprot.org/citations/21808019" target="_blank">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)

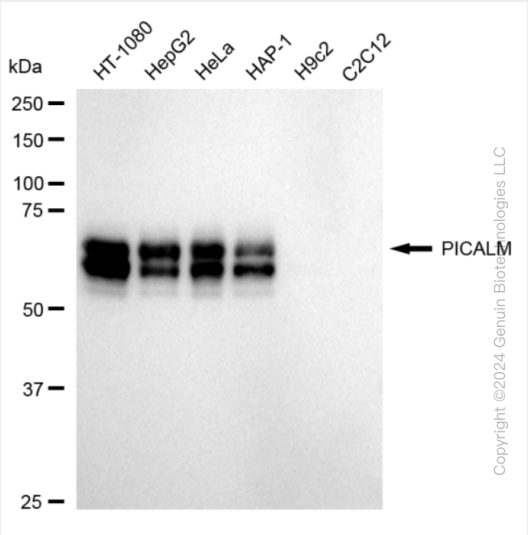
Tissue Location
Expressed in all tissues examined.

KD-Validated Anti-PICALM Rabbit Monoclonal 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

KD-Validated Anti-PICALM Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-PICALM antibody (Cat#AGI1696). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-PICALM antibody (Cat#AGI1696, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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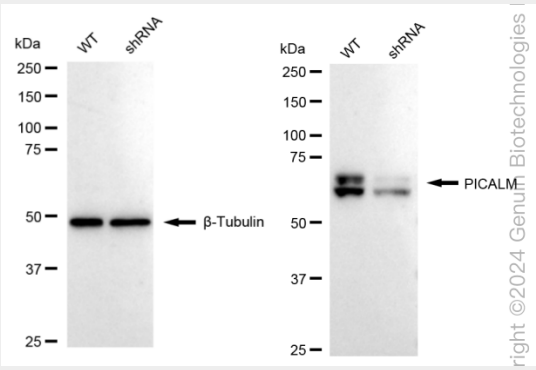
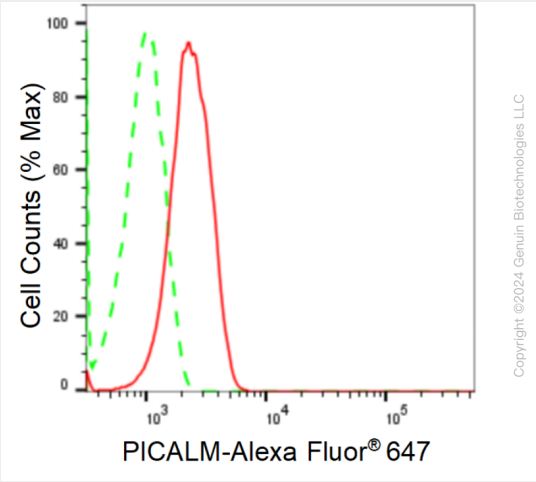


Western blotting analysis using anti-PICALM antibody (Cat#AGI1696). PICALM expression in wild type (WT) and PICALM shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-PICALM antibody (Cat#AGI1696, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of PICALM expression in HT-1080 cells using anti-PICALM antibody (Cat#AGI1696, 1:2,000). Green, isotype control; red, PICALM.