

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
Gene Name	KDa
Aliases	PICALM
	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:25898166).

[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

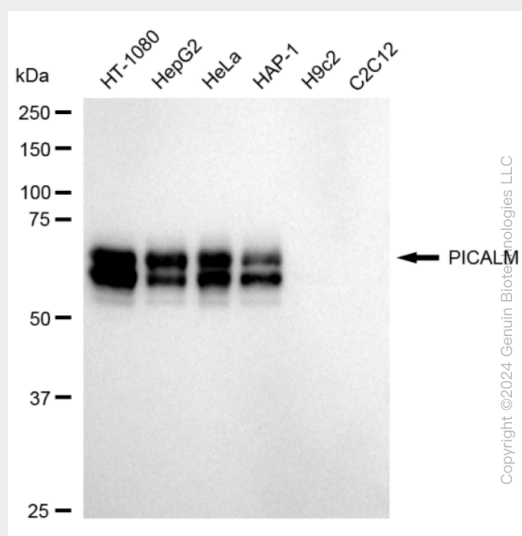
Expressed in all tissues examined.

KD-Validated Anti-PICALM Rabbit Monoclonal Antibody - Protocols

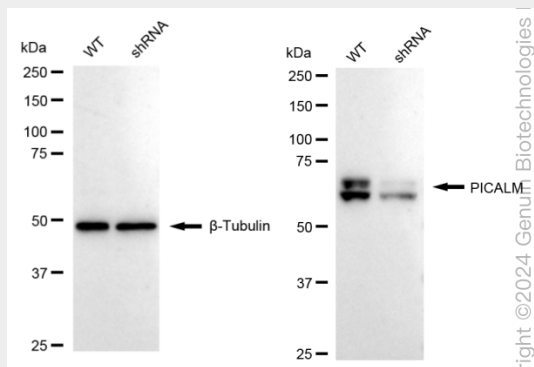
Provided below are standard protocols that you may find useful for product applications.

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

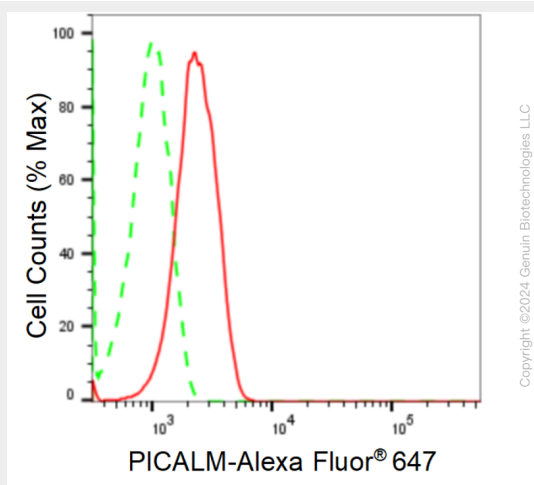
KD-Validated Anti-PICALM Rabbit Monoclonal Antibody - Images



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.



Western blotting analysis using anti-PICALM antibody (Cat#AGI1696). PICALM expression in wild type (WT) and PICALM shRNA knockdown (KD) HeLa cells with 20 μ g 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.