

KD-Validated Anti-PICALM Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1696

Product Information

Application	WB, FC
Primary Accession	Q13492
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB1620
Calculated MW	70755
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

Additional Information

Gene ID	8301
Other Names	Phosphatidylinositol-binding clathrin assembly protein, Clathrin assembly lymphoid myeloid leukemia protein, PICALM, CALM

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.

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