10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PCM-1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7481b

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	Q15154
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18330
Calculated MW	228560
Antigen Region	1816-1845

Additional Information

Gene ID	5108
Other Names	Pericentriolar material 1 protein, PCM-1, hPCM-1, PCM1
Target/Specificity	This PCM-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1816-1845 amino acids from the C-terminal region of human PCM-1.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 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	PCM-1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PCM1 (HGNC:8727)
Function	Required for centrosome assembly and function (PubMed: 12403812, PubMed:15659651, PubMed:16943179). Essential for the correct localization of several centrosomal proteins including CEP250, CETN3, PCNT and NEK2 (PubMed:12403812, PubMed:15659651). Required to anchor microtubules to

	the centrosome (PubMed:12403812, PubMed:15659651). Also involved in cilium biogenesis by recruiting the BBSome, a ciliary protein complex involved in cilium biogenesis, to the centriolar satellites (PubMed:20551181, PubMed:24121310, PubMed:27979967). Recruits the tubulin polyglutamylase complex (TPGC) to centriolar satellites (PubMed:34782749).
Cellular Location	Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q8AV28}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasmic granule. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite. Cytoplasm, cytoskeleton, cilium basal body. Note=Recruitment to the centrosome requires microtubules and dynein. The majority of the protein dissociates from the centrosome during metaphase and subsequently localizes to the cleavage site in telophase. Displaced from centriolar satellites and centrosome in response to cellular stress, such as ultraviolet light (UV) radiation or heat shock, in a process that requires p38 MAP kinase signaling
Tissue Location	Expressed in blood, bone marrow, breast, lymph node, ovary and thyroid.

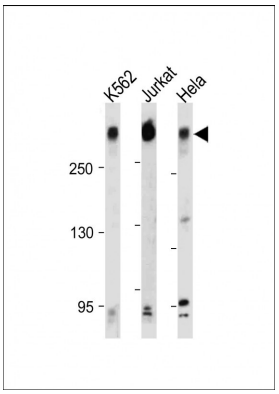
Background

PCM-1 is required for centrosome assembly and function. This protein is essential for the correct localization of several centrosomal proteins including CEP250, CETN3, PCNT and NEK2. The protein is required to anchor microtubules to the centrosome.

References

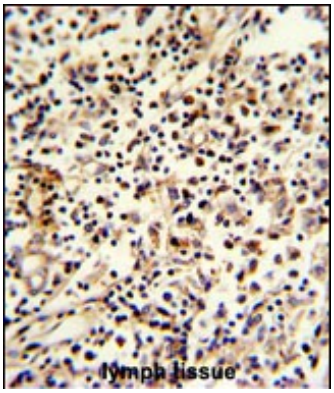
Balczon R., Bao L.J. Cell Biol. 124:783-793(1994)
Corvi R., Berger N.Oncogene 19:4236-4242(2000)
Dammermann A., Merdes A.J. Cell Biol. 159:255-266(2002)
Reiter A., Walz C.Cancer Res. 65:2662-2667(2005)
Murati A., Gelsi-Boyer V.Leukemia 19:1692-1696(2005)
Hames R.S., Crookes R.E.Mol. Biol. Cell 16:1711-1724(2005)

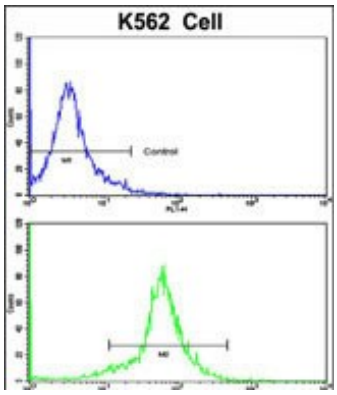
Images



All lanes : Anti-PCM-1 Antibody (C-term) at 1:500-2000 dilution Lane 1: K562 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 229 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human lymph reacted with PCM-1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





Flow cytometric analysis of K562 cells using PCM-1 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.