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Store at -20C
#5213

PCM-1 (G2000) Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP, IF-IC, FC-FP	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 228	Source/Isotype: Rabbit	UniProt ID: #Q15154	Entrez-Gene Id: 5108
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Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:100
1:800
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

PCM-1 (G2000) Antibody detects endogenous levels of PCM-1 protein. Species cross-reactivity for IF-IC is human only.

Species predicted to react based on 100% sequence homology

Monkey

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to a region near the carboxyl terminus of human PCM-1 protein. Antibodies were purified by protein A and peptide affinity chromatography.

Background

The centrosome is composed of a pair of centrioles surrounded by electron-dense pericentriolar material and functions as the microtubule-organizing center responsible for microtubule nucleation and spindle organization during cell cycle progression (1). Pericentriolar material 1 (PCM-1) is a large, 228 kDa protein associated with the centrosome in a cell cycle-dependent manner (2). PCM-1 localizes to small cytoplasmic granules called centriolar satellites (3). PCM-1 is required for the assembly of several centrosomal proteins, including centrin, pericentrin, ninein, NEK2, and CEP250 (4-8). Chromosomal translocations involving genes encoding PCM-1 and the tyrosine kinases Ret and Jak2 are associated with some cancers, including papillary thyroid carcinoma and myeloid leukemia (9-11).

Background References

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- Balczon, R. et al. (1994) *J Cell Biol* 124, 783-93.
- Kubo, A. and Tsukita, S. (2003) *J Cell Sci* 116, 919-28.
- Kim, J. et al. (2008) *Hum Mol Genet* 17, 3796-805.
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- Li, Q. et al. (2001) *J Cell Sci* 114, 797-809.
- Hames, R.S. et al. (2005) *Mol Biol Cell* 16, 1711-24.
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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human **M:** Mouse

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