

PCM1 (H-262): sc-67204

BACKGROUND

Pericentriolar material is a dynamic substance whose composition can oscillate during the cell cycle. PCM1 (pericentriolar material 1) is a centrosomal protein that demonstrates a distinct cell cycle-dependent association with the centrosome complex. PCM1 is securely associated with the centrosome complex through G₁, S and a portion of G₂. However, late in G₂, as cells prepare for mitosis, PCM1 dissociates from the centrosome and then remains evenly diffused throughout the cell during mitosis before re-associating with the centrosomes in the G₁ phase progeny cells. The chromosomal localization of the PCM1 on human chromosome 8p22 is one of interest since this region is commonly deleted in several tumors. In thyroid tumor tissue, PCM1 expression drastically decreases and its subcellular localization is shifted.

CHROMOSOMAL LOCATION

Genetic locus: PCM1 (human) mapping to 8p22; Pcm1 (mouse) mapping to 8 A4.

SOURCE

PCM1 (H-262) is a rabbit polyclonal antibody raised against amino acids 1-262 mapping at the N-terminus of PCM1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

PCM1 (H-262) is recommended for detection of PCM1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PCM1 (H-262) is also recommended for detection of PCM1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PCM1 siRNA (h): sc-61305, PCM1 siRNA (m): sc-61306, PCM1 shRNA Plasmid (h): sc-61305-SH, PCM1 shRNA Plasmid (m): sc-61306-SH, PCM1 shRNA (h) Lentiviral Particles: sc-61305-V and PCM1 shRNA (m) Lentiviral Particles: sc-61306-V.

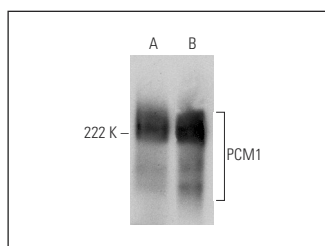
Molecular Weight of PCM1: 228 kDa.

Positive Controls: Ramos cell lysate: sc-2216 or K-562 whole cell lysate: sc-2203.

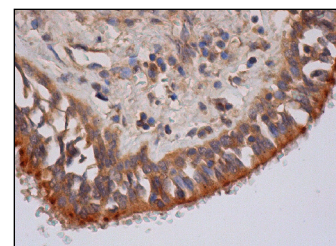
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



PCM1 (H-262): sc-67204. Western blot analysis of PCM1 expression in Ramos (A) and K-562 (B) whole cell lysates.



PCM1 (H-262): sc-67204. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing cytoplasmic staining of respiratory epithelial cells.

SELECT PRODUCT CITATIONS

1. Kloc, M., et al. 2008. Mouse early oocytes are transiently polar: three-dimensional and ultrastructural analysis. *Exp. Cell Res.* 314: 3245-3254.
2. Kodani, A., et al. 2010. Par6 α interacts with the dynactin subunit p150 glued and is a critical regulator of centrosomal protein recruitment. *Mol. Biol. Cell* 21: 3376-3385.
3. Marley, A. and von Zastrow, M. 2010. DISC1 regulates primary cilia that display specific dopamine receptors. *PLoS ONE* 5: e10902.
4. Lee, J.Y. and Stearns, T. 2013. FOP is a centriolar satellite protein involved in ciliogenesis. *PLoS ONE* 8: e58589.
5. Zhang, B., et al. 2015. GSK3 β -Dzip1-Rab8 cascade regulates ciliogenesis after mitosis. *PLoS Biol.* 13: e1002129.



Try **PCM1 (G-6): sc-398365**, our highly recommended monoclonal alternative to PCM1 (H-262).