

AM09123SU-N

Monoclonal Antibody to Plakophilin 3 / PKP3 - Supernatant

Alternate names:

Plakophilin-3

Quantity:

5 ml

Background:

Plakophilin 3 is an Armadillo-like protein present in nuclei and desmosomes of epithelial cells. The expression pattern of this protein seems to be largely restricted to epithelial cell types. Plakophilin-3 can be detected along cell borders in a punctuate staining pattern typical for desmosomal proteins. In addition to the desmosomal immunolocalisation, immunostaining was observed as bright nuclear speckles. Thus, like plakophilin-1 and -2, plakophilin-3 displays a dual intracellular localisation in the desmosomal plaque and in the cell nucleus, and therefore is probably involved in signal transduction pathways between the plasma membrane and the nucleus. The human protein has a predicted molecular mass of 87 kD.

Uniprot ID:

[Q9Y446](#)

NCBI:

[NP_009114](#)

GeneID:

[11187](#)

Host / Isotype:

Mouse / IgG1

Clone:

PKP3-270.6.2

Immunogen:

Recombinant protein (E. coli) of human plakophilin 3

Format:

State: Liquid culture supernatant

Applications:

Immunoblotting: 1/500 ECL method.

Immunofluorescence.

Immunohistochemistry on frozen sections: Ready-to-use.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

This antibody reacts to Plakophilin 3.

Positive tissues and culture cells:

- stratified squamous epithelia: palmar, epidermis, scalp skin
- stratified epithelia: tongue, vagina, esophagus
- transitional epithelia: bladder
- non-stratified epithelia: colon, duodenum, pancreas, several glands
- non-epithelial: reticulum cells of lymph node follicle
- HaCaT, MCF7, HeLa, HT-29, CaCo 2, Caski, BMGE, MDCK and other

Negative tissues and cell lines:

- liver, heart, skeletal muscle, endothelia (vessels)
- PLC, RD, SV80, HL60, Raji, Jok1, Glioma, K562, 3T3L1, A6, PtK2

Species: Human, Bovine, Mouse, Xenopus laevis.

Other species not tested.

Storage: Store the antibody undiluted at 2-8°C.
DO NOT FREEZE!
Shelf life: one year from despatch.

General Readings:

1. Schmidt A, Langbein L, Prätzel S, Rackwitz HR, Franke WW: Plakophilin 3 – A novel cell-type specific plaque protein. *Differentiation* 64(5):291-306 (1999)
2. Vasioukin V, Bowers E, Bauer C, Degenstein L, Fuchs E: Desmoplakin is essential in epidermal sheet formation. *Nature Cell Biology* 3, 1076-1085 (2001)
3. Akat K, Mennel HD, Kremer P, Gassler N, Bleck CK, Kartenbeck J. Molecular characterization of desmosomes in meningiomas and arachnoidal tissue. *Acta Neuropathol.* 2003 Oct;106(4):337-47. Epub 2003 Jul 5. PubMed PMID: 12845453.