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BM6030P Monoclonal Antibody to Plakophilin 3 / PKP3 - Purified

Alternate names: Plakophilin-3

Quantity: 0.1 mg
Concentration: 1.0 mg/ml

Background: Plakophilin-3 is an Armadillo-like protein present in nuclei and desmosomes of

epithelial cells [1]. 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: <u>Q9Y446</u>

NCBI: NP 009114.1

GenelD: <u>11187</u>

Host / Isotype: Mouse / IgG2a Recommended Isotype AM03096PU-N

Controls:

Clone: 12B11F8

Immunogen: Synthetic peptide corresponding to amino acid residues 779-793 of Human

Plakophilin-3 coupled to keyhole limpet hemocyanin via an additional cysteine

residue at the N-terminus (CKLHRDFAKGYRKED).

Format: State: Liquid purified IgG fraction.

Buffer System: PBS with 0.09% Sodium Azide as preservative.

Applications: Immunocytochemistry (methanol-fixed cells).

Immunohistochemistry on Frozen Tissues.

Immunoprecipitation. Western blot detection.

For optimal results, fixed cells or tissues should be treated with 0.2% Triton-X 100 for

5 min. prior to incubation with primary antibody.

<u>Recommended Dilutions</u>: 1/25-1/200 for Immunohistochemistry with avidinbiotinylated horseradish peroxidase complex (ABC) as detection reagent, and

1/100-1/1000 for Immunoblotting applications.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

ORIGENE BM6030P: Monoclonal Antibody to Plakophilin 3 / PKP3 - Purified

Specificity: This antibody reacts with an epitope located between residues 779-793 in Human

Plakophilin-3.

Species: Human, Mouse, Canine (Dog) and Swine.

Other species not tested.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Bonné S, van Hengel J, Nollet F, Kools P, van Roy F. Plakophilin-3, a novel armadillo-

like protein present in nuclei and desmosomes of epithelial cells. J Cell Sci. 1999

Jul;112 (Pt 14):2265-76. PubMed PMID: 10381383.

2. Bonné, S., Gilbert, B., Hatzfeld, M., Chen, X., Green, K.J., van Roy, F. (2003). Defining desmosomal plakophilin-3 interactions. J Cell Biol 161,2, 403-416.