

AM09132SU-N

Monoclonal Antibody to Plakophilin-4 (85-104) - Supernatant

Alternate names:	PKP4, p0071
Quantity:	5 ml
Background:	Plakophilin 4 (PKP4) is an Armadillo-like protein, characterized by a series of armadillo repeats. It is a component of desmosomal plaques and may play a role in junctional plaque organization.
Uniprot ID:	Q99569
NCBI:	NP_001005476.1
GeneID:	8502
Host / Isotype:	Mouse / IgG1
Clone:	7.7.9 (p0071-1)
Immunogen:	Synthetic peptide of human p0071 (aa position 85-104: EKSPWRSTDVNTGVSKPR)
Format:	State: Liquid Hybridoma Culture Supernatant Preservatives: 0.09% Sodium Azide
Applications:	Immunoblotting: 1/10-1/50. Immunofluorescence: Undiluted. Immunohistochemistry on Frozen Sections: Undiluted. Immunohistochemistry on Paraffin Sections: <u>Incubation Time:</u> 1-1.5 h at RT. <u>Positive Control:</u> MCF-7 cells. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes Plakophilin-4. Detects a plaque protein (p0071) specific for a subtype of adherens junctions, with a molecular mass of 135 kD and is closely related to neurojungin / delta-catenin and ARVC (all belonging to the p120 armadillo subfamily). p0071 is specifically detected in the plaques of the composite junctions (area compositae) of cardiac intercalated disks, in puncta adhaerentia of single- and multi-layered epithelia and blood vessel endothelial cells.; it is, however, absent from desmosomes. This protein was also described as plakophilin 4. <u>Tested Reactivities on Cultured Cell Lines:</u> MCF-7, A431, CaCo-2, HT-29, PLC, 16HBE14o, HaCaT, SV80, U333 CG, 3T3, RVF-SMC, MH1C1.
Species Reactivity:	Tested: Human, Bovine and Mouse
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.

Product Citations:

Purchased from Acris:

1. Todorović V, Koetsier JL, Godsel LM, Green KJ. Plakophilin 3 mediates Rap1-dependent desmosome assembly and adherens junction maturation. *Mol Biol Cell*. 2014 Sep 10. pii: mbc.E14-05-0968. PubMed PMID: 25208567.

General Readings:

1. Hofmann I, Schlechter T, Kuhn C, Hergt M, Franke WW. Protein p0071 - an armadillo plaque protein that characterizes a specific subtype of adherens junctions. *J Cell Sci*. 2009 Jan 1;122(Pt 1):21-4. doi: 10.1242/jcs.043927. PubMed PMID: 19092057.
2. Hofmann I, Kuhn C, Franke WW. Protein p0071, a major plaque protein of non-desmosomal adhering junctions, is a selective cell-type marker. *Cell Tissue Res*. 2008 Dec;334(3):381-99. doi: 10.1007/s00441-008-0725-2. Epub 2008 Nov 13. PubMed PMID: 19005682.