

Product datasheet

anti-Plakophilin 2 mouse monoclonal, Pkp2-518, supernatant

Short overview

| | |
|-----------------|--------|
| Cat. No. | 651167 |
| Quantity | 5 ml |

Product description

| | |
|----------------------|---|
| Host | Mouse |
| Antibody Type | Monoclonal |
| Isotype | IgG1 |
| Clone | Pkp2-518 |
| Immunogen | Synthetic carboxyterminal peptide (aa 527 - 872) of human plakophilin 2 |
| Formulation | Contains 0.09% sodium azide |
| UniprotID | A0A3Q1M2G3 (Bovine), Q99959 (Human), Q9CQ73 (Mouse), Q562C0 (Rat) |
| Synonym | Plakophilin-2, PKP2 |
| Conjugate | Unconjugated |
| Purification | Hybridoma cell culture supernatant |
| Storage | Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles |
| Intended use | Research use only |
| Application | IEM, IHC, IP, WB |
| Reactivity | Human, Mouse, Rat |
| No reactivity | Amphibia, Fish |

Applications

| | |
|--|--|
| Cell-based Assay | Assay dependent |
| Immunohistochemistry (IHC) - frozen | Ready-to-use |
| Immunohistochemistry (IHC) - paraffin | Ready-to-use (microwave treatment recommended) |
| Immunoprecipitation (IP) | Assay dependent |
| Western Blot (WB) | 1:5-1:10 |

Background

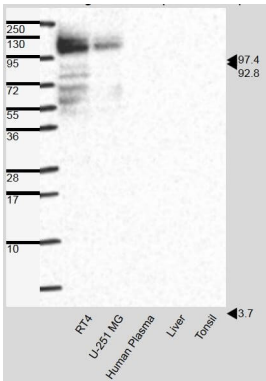
The mab recognizes plakophilin 2 in both locations: in the desmosomal plaque and in the karyoplasm. Plakophilin 2 is a member of the arm-repeat family of proteins which can occur in at least 2 splice forms (2a and 2b). Plakophilin 2 assembles with other proteins to form the desmosomal plaque in simple and glandular epithelia, the basal layer of certain stratified epithelia, all layers of some stratified epithelia, in Merkel cells, and desmosome-possessing nonepithelial cells such as myocardium, Purkinje fibers, and dendritic reticulum of lymph node follicles. In all these cells, including a variety of cell types devoid of desmosomes, plakophilin 2 is highly enriched in the nuclei (karyoplasm). Polypeptide reacting: Plakophilin 2, Mr ~100 kDa (SDS-PAGE); MW calculated from aa sequence: 92,750 (pI 9.33) and 97,410 (pI 9.38) Positive staining was obtained with several carcinomas derived from simple-type epithelia (e.g. hepatomas, colon carcinomas) and some adenocarcinomas derived from stratified epithelia (oesophagus carcinoma). Recommendation for immunohistochemistry on frozen sections: For better accessibility of the

PROGEN Biotechnik GmbH | Maaßstraße 30 | D-69123 Heidelberg

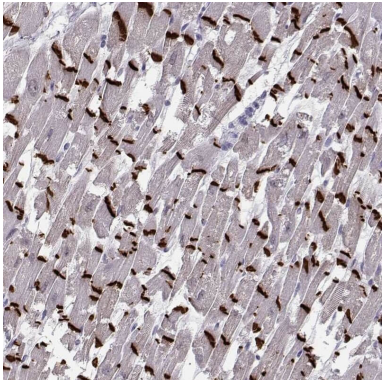
Tel.: +49 (0) 6221 8278-0 | Fax: +49 (0) 6221 8278-24 | Email: info@progen.com | Web: www.progen.com

desmosome-associated antigen frozen sections might be pre-incubated for 5 min in PBS plus 0.2% Triton X-100 prior to antibody application. Longer incubation could result in a loss of Pkp2-nuclear staining. To prevent wash-out of soluble forms of the antigen, fixation with 2% formaldehyde is recommended.

Product images



Western blot with anti-Plakophilin 2 on various tissues (courtesy of The Human Protein Atlas, www.proteinatlas.org, Thul PJ et al, 2017. A subcellular map of the human proteome. Science)



Plakophilin 2 staining on human heart muscle (courtesy of The Human Protein Atlas, www.proteinatlas.org, Thul PJ et al, 2017. A subcellular map of the human proteome. Science)

References

| Publication | Species | Application |
|--|-------------|--------------------------|
| Ragni, C. V. et al. Amotl1 mediates sequestration of the Hippo effector Yap1 downstream of Fat4 to restrict heart growth. Nat. Commun. 8, 1â€“11 (2017) | mouse | ICC-IF |
| Rickelt, S. Plakophilin-2: a cell-cell adhesion plaque molecule of selective and fundamental importance in cardiac functions and tumor cell growth. Cell Tissue Res. 348, 281â€“94 (2012). | human,mouse | WB,IHC (paraffin),ICC-IF |
| Rickelt, S. et al. A novel kind of tumor type-characteristic junction: plakophilin-2 as a major protein of adherens junctions in cardiac myxomata. Mod. Pathol. 23, 1429â€“1437 (2010). | human | WB,IHC (paraffin),ICC-IF |