

## Product datasheet

### anti-Plakophilin 3 mouse monoclonal, PKP3-270.6.2, supernatant

#### Short overview

|                 |        |
|-----------------|--------|
| <b>Cat. No.</b> | 651113 |
| <b>Quantity</b> | 5 ml   |

#### Product description

|                      |   |
|----------------------|---|
| <b>Host</b>          | Mouse   |
| <b>Antibody Type</b> | Monoclonal  |
| <b>Isotype</b>       | IgG1  |
| <b>Clone</b>         | PKP3-270.6.2  |
| <b>Immunogen</b>     | Recombinant protein (E. coli) of human plakophilin 3                                  |
| <b>Formulation</b>   | Contains 0.09% sodium azide   |
| <b>UniproID</b>      | Q08DQ0 (Bovine), Q9Y446 (Human), Q9QY23 (Mouse), D3ZJ50 (Rat)                         |
| <b>Synonym</b>       | Plakophilin-3, PKP3   |
| <b>Conjugate</b>     | Unconjugated  |
| <b>Purification</b>  | Hybridoma cell culture supernatant  |
| <b>Storage</b>       | Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles |
| <b>Intended use</b>  | Research use only   |
| <b>Application</b>   | ICC/IF, IHC, WB   |
| <b>Reactivity</b>    | Human, Mouse, Rat   |

#### Applications

|  |  |
|--|--|
| <b>Immunocytochemistry (ICC)</b>             | Assay dependent                                  |
| <b>Immunohistochemistry (IHC) - frozen</b>   | Undiluted-1:10                                   |
| <b>Immunohistochemistry (IHC) - paraffin</b> | Undiluted-1:10 (microwave treatment recommended) |
| <b>Western Blot (WB)</b>                     | 1:500  |

#### Background

Plakophilin 3 is seen in most desmosomes and partly dispersed in cytoplasm under various fixation conditions (FA, MeAc long, MeAc short):

Positive tissues and culture cells:

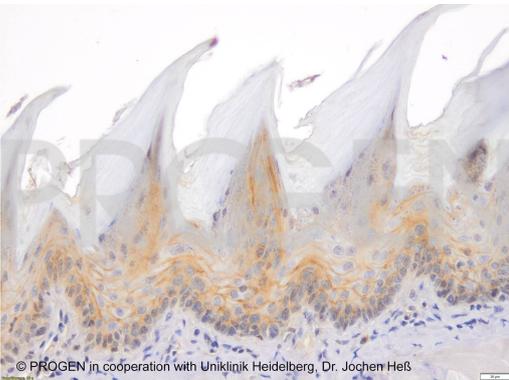
- Stratified squamous epithelia: palmar, epidermis, scalp skin
- Stratified epithelia: tongue, vagina, esophagus
- Transitional epithelia: bladder

- 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

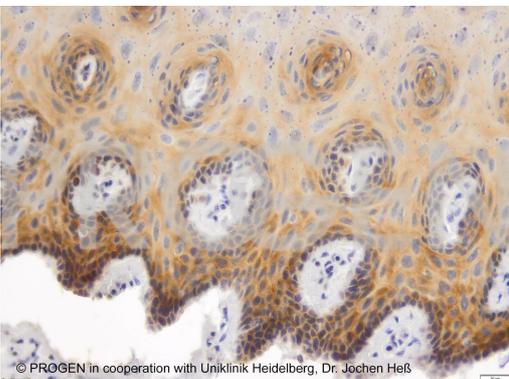
## Product images



IHC of mouse tongue (© PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Heß)



IHC of human skin (© PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Heß)



IHC of rat tongue (© PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Heß)

## References

| Publication   | Species              | Application                |
|---|----------------------|----------------------------|
| <a href="#">Wanuske, M. T. et al. Clustering of desmosomal cadherins by desmoplakin is essential for cell-cell adhesion., Acta Physiol (Oxf) 231, e13609, (2021).</a>   | human                | WB                         |
| <a href="#">Domke, L and Franke, W. The cell-cell junctions of mammalian testes..., Cell Tissue Res, 375, 451-482, (2019)</a>   | bovine               | ICC-IF                     |
| <a href="#">Fischer-KeÄjo, R. et al. Plakophilins 1 and 3 bind to FXR1 and thereby influence the mRNA stability of desmosomal proteins. Mol. Cell. Biol. 34, 4244â€“56 (2014).</a>  | human                | WB,IP                      |
| <a href="#">Hofmann, I. et al. Identification of the junctional plaque protein plakophilin 3 in cytoplasmic particles containing RNA-binding proteins and the recruitment of plakophilins 1 and 3 to stress granules. Mol. Biol. Cell 17, 1388â€“98 (2006).</a> | human,bovine,xenopus | WB,ICC-IF,IEM              |
| <a href="#">Schmidt, A., Langbein, L. &amp; Franke, W. W. Plakophilin 3 - a novel cell type, specific desmosomal plaque. Differentiation 65, 71 (1999).</a>   | human,bovine,xenopus | WB,IHC (frozen),ICC-IF,IEM |