

Product datasheet

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

Short overview

Cat. No.	651113
Quantity	5 ml

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG1
Clone	PKP3-270.6.2
Immunogen	Recombinant protein (E. coli) of human plakophilin 3
Formulation	Contains 0.09% sodium azide
UniprotID	Q08DQ0 (Bovine), Q9Y446 (Human), Q9QY23 (Mouse), D3ZJ50 (Rat)
Synonym	Plakophilin-3, PKP3
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	ICC/IF, IHC, WB
Reactivity	Human, Mouse, Rat

Applications

Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	Undiluted-1:10
Immunohistochemistry (IHC) - paraffin	Undiluted-1:10 (microwave treatment recommended)
Western Blot (WB)	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:

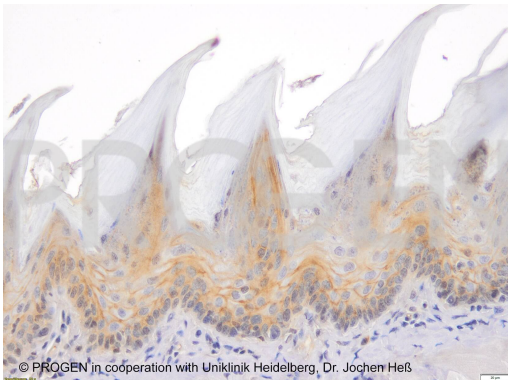
- Stratified squamous epithelia: palmar, epidermis, scalp skin
- Stratified epithelia: tongue, vagina, esophagus
- Transitional epithelia: bladder

- 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

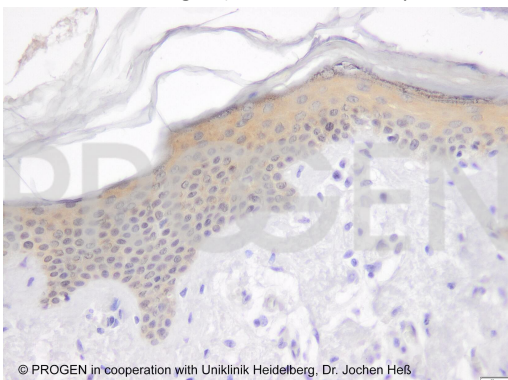
Negative tissues and cell lines:

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

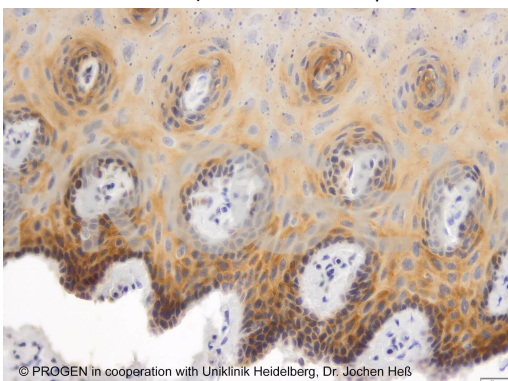
Product images



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
Wanuske, M. T. et al. Clustering of desmosomal cadherins by desmoplakin is essential for cell-cell adhesion., Acta Physiol (Oxf) 231, e13609, (2021).	human	WB
Domke, L and Franke, W. The cell-cell junctions of mammalian testes..., Cell Tissue Res, 375, 451-482, (2019)	bovine	ICC-IF
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).	human,bovine,xenopus	WB,ICC-IF,IEM
Fischer-KeÅjo, 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).	human	WB,IP
Schmidt, A., Langbein, L. & Franke, W. W. Plakophilin 3 - a novel cell type, specific desmosomal plaque. Differentiation 65, 71 (1999).	human,bovine,xenopus	WB,IHC (frozen),ICC-IF,IEM