Product datasheet

anti-Plakoglobin mouse monoclonal, PG 5.1, liquid, purified

Short overview

Cat. No.	690005
Quantity	1 ml
Concentration	50 µg/ml (50 µg)

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG2b
Clone	PG 5.1
Immunogen	Plakoglobin, "band 5" protein from bovine snout epidermis
Formulation	PBS pH 7.4 with 0.09% sodium azide and 0.5% BSA
Conjugate	Unconjugated
Purification	Affinity chromatography
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	Bovine, Dog, Human, Mouse, Rat, Zebrafish

Applications

Immunocytochemistry (ICC)	1:5 (10 µg/ml)
Immunohistochemistry (IHC) - frozen	1:25-1:100 (0.5-2 µg/ml)
Immunohistochemistry (IHC) - paraffin	1:25-1:100 (0.5-2 µg/ml, microwave treatment recommended)
Western Blot (WB)	1:500-1:2,000 (0.025-0.1 µg/ml)

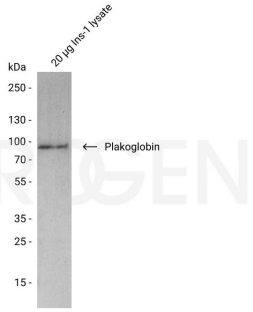
Background

PG 5.1 represents an excellent marker for all forms of intercellular adhering junctions, such as: desmosomes of epithelial and myocardial cells (incl. cultured cells); zonulae and fasciae adherentes of epithelia, endothelia of blood vessels and myocardial cells; adherens-type junctions (e.g. lens tissue, pigmented retinal cells, Sertoli cells of testis). The PG 5.1 epitope maps within the C-terminus at the extreme end of repeat 13 (aa 632-687) of plakoglobin. Polypeptide reacting: Mr 83,000 Plakoglobin, 'band 5' polypeptide of intercellular adhering junctions (identical to gamma-catenin).

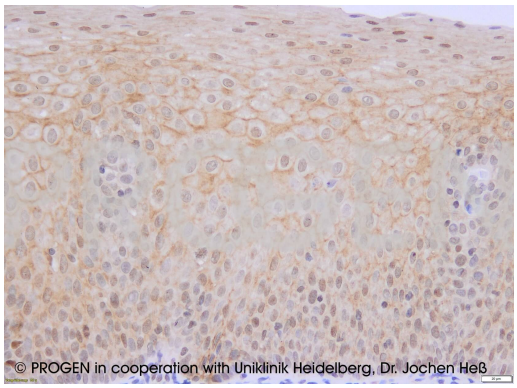
Reactivity on cultured cell lines: cell cultures forming monolayers.

Product images

IHC of rat tongue (courtesy of J.Heß, University Hospital Heidelberg)



Western blot analysis of Ins-1 lysate and with anti-Plakoglobin antibody. Western blot analysis was performed on 20 µg rat Ins-1 lysate. The PVDF membrane was blocked with 5% milk in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibody anti-Plakoglobin mouse monoclonal, PG 5.1 (Cat. No. 690005) was diluted in blocking buffer (antibody concentration 25 ng/ml) and incubated for 1 h at RT. The secondary antibody anti-mouse IgG, HRP conjugate was also diluted in blocking buffer (antibody concentration 200 ng/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using PierceTM ECL Western Blotting Substrate.



IHC of human oral mucosa (courtesy of J.Heß, University Hospital Heidelberg)

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
Ding, Y. et al. Knockout of SORBS2 Protein Disrupts the Structural Integrity of Intercalated Disc and Manifests Features of Arrhythmogenic Cardiomyopathy. J Am Heart Assoc. 9, e017055(2020).	mouse	IHC (frozen), WB
Schinner, C. et al. Stabilization of desmoglein-2 binding rescues arrhythmia in arrhythmogenic cardiomyopathy. JCI.Insight. 5, (2020)	mouse	WB,IHC (frozen)
Walter, E. et al. Role of Dsg1- and Dsg3-Mediated Signaling in Pemphigus Autoantibody-Induced Loss of Keratinocyte Cohesion. Front.Immunol. 10, 1128 (2019)	human	WB,IHC
Dayal, J. H. S. et al. Type VII collagen regulates expression of OATP1B3, promotes front-to-rear polarity and increases structural organisation in 3D spheroid cultures of RDEB tumour keratinocytes. J. Cell Sci. 127, 740â€“51 (2014).	human	ICC-IF