

Product datasheet

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

Short overview

Cat. No.	61005
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml dist. water

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG2b
Clone	PG 5.1
Immunogen	Plakoglobin, "band 5" protein from bovine snout epidermis
Formulation	Lyophilized; reconstitute in 1 ml dist. water (final solution contains 0.09% sodium azide, 0.5% BSA in PBS buffer, pH 7.4)
Conjugate	Unconjugated
Purification	Affinity chromatography
Storage before reconstitution	2-8°C until indicated expiry date
Storage after reconstitution	Up to 3 months 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).

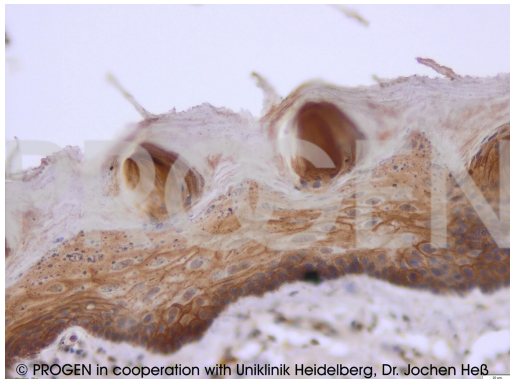
Reactivity on cultured cell lines: cell cultures forming monolayers.

PROGEN Biotechnik GmbH | Maaßstraße 30 | D-69123 Heidelberg

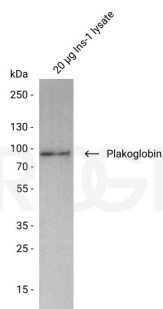
Tel.: +49 (0) 6221 8278-0 | Fax: +49 (0) 6221 8278-24 | Email: info@progen.com | Web: www.progen.com

2024 April 19 / Version: 61005/DS-220222lim | Page 1

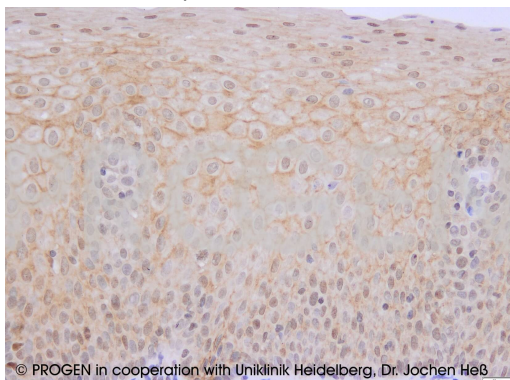
Product images



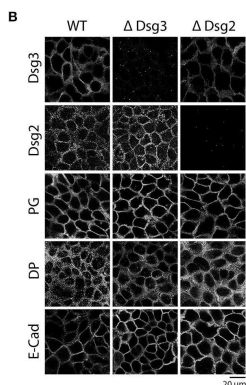
IHC of rat tongue (courtesy of J.Heß, University Hospital Heidelberg)



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 Pierce™ ECL Western Blotting Substrate.



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

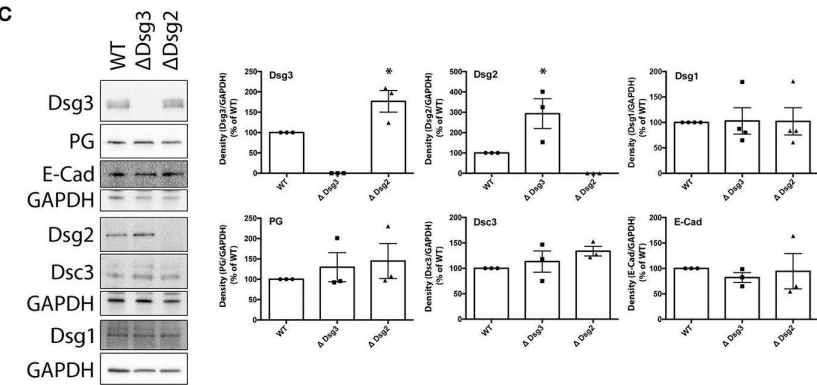


[Walter, E., Vielmuth, F., et al. Role of Dsg1- and Dsg3-Mediated Signaling in Pemphigus Autoantibody-Induced Loss of Keratinocyte Cohesion. Front Immunol. 2019-06-11.](#) Species/Reactant: Homo sapiens (Human) Applications: Immunohistochemistry Image collected and cropped by

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

CiteAb from the following publication, provided under a CC-BY licence.



[Walter, E., Vielmuth, F., et al. Role of Dsg1- and Dsg3-Mediated Signaling in Pemphigus Autoantibody-Induced Loss of Keratinocyte Cohesion. Front Immunol. 2019-06-11.](#) Species/Reactant: Homo sapiens (Human)Applications: Western BlottingImage collected and cropped by CiteAb from the following publication, provided under a CC-BY licence.

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
Moll, I., Kurzen, H., Langbein, L., Erner, W. & Franke, W. The Distribution of the Desmosomal Protein, Plakophilin 1, in Human Skin and Skin Tumors. J. Invest. Dermatol. 108, 139â€"146 (1997).	human	IHC (frozen)
Cowin, P., Kapprell, H. P., Franke, W. W., Tamkun, J. & Hynes, R. O. Plakoglobin: a protein common to different kinds of intercellular adhering junctions. Cell 46, 1063â€"73 (1986).	human	WB,ICC-IF,IEM
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
Schinner, C. et al. Stabilization of desmoglein-2 binding rescues arrhythmia in arrhythmogenic cardiomyopathy. JCI.Insight. 5, (2020)	mouse	WB,IHC (frozen)