

Product datasheet

anti-Desmoglein 1/2 mouse monoclonal, DG 3.10, liquid, purified

Short overview

Cat. No.	690002
Quantity	1 ml
Concentration	50 µg/ml (50 µg)

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG1
Clone	DG 3.10
Immunogen	"Band 3" polypeptide of isolated desmosomes from bovine muzzle epidermis
Formulation	PBS pH 7.4 with 0.09% sodium azide and 0.5% BSA
UniprotID	Q02413 (Human), D3ZM39 (Rat), Q03763 (Bovine)
Synonym	Desmoglein-1, Cadherin family member 4, Desmosomal glycoprotein 1, DG1, DGI, Pemphigus foliaceus antigen, DSG1, CDHF4
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, Human, Rat

Applications

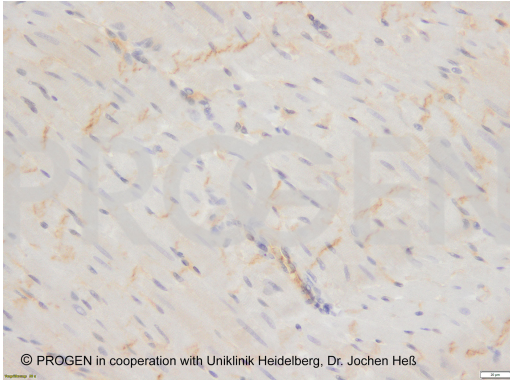
Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	1:10-1:100 (0.5-5 µg/ml)
Immunohistochemistry (IHC) - paraffin	1:10-1:100 (0.5-5 µg/ml, microwave treatment recommended)
Western Blot (WB)	1:2000 - 1:4000 (12.5 ng/ml - 25 ng/ml)

Background

DG 3.10 recognizes desmoglein 1 + 2 (desmosome-specific cadherins) in desmosome-bearing cells; does not react with cells containing plaque-bearing junctions of non-desmosomal type. Tumors specifically detected: all epithelium-derived tumors, notably carcinomas, and meningiomas. Polypeptide reacting: Mr 165 000 Desmoglein, "band 3" polypeptide of the desmosomal complex. Epitope recognized has been localized at the repeating unit domain ("RUD") of the cytoplasmic C-terminal part of the polypeptide.

Reactivity on cultured cell lines: A-431, MDBK.

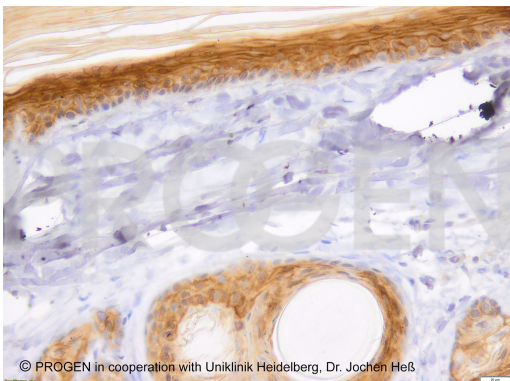
Product images



IHC of rat heart with anti-Desmoglein 1/2 (1:50, © PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Heß)



Western blot analysis of HaCat cell lysate with anti-Desmoglein 1/2 antibody. Western blot analysis was performed on 10 µg of HaCat lysate. Cells were lysed with RIPA buffer. The PVDF membrane was blocked with 5% dry milk in PBST for 1 h at RT. The primary antibody anti-Desmoglein 1/2 mouse monoclonal, DP1 + 2-2.15 (Cat. No. 61002) was diluted in blocking buffer (antibody concentration 0.0125 µg/ml) and incubated for 1 h at RT. The secondary antibody goat anti-mouse IgG polyclonal, HRP conjugate was also diluted in blocking buffer (antibody concentration 0.2 µg/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using Pierce™ ECL Western Blotting Substrate.



IHC of rat tail with anti-Desmoglein 1/2 (1:50, © PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Heß)

References

Publication	Species	Application
Franke, W. W., Borrmann, C. M., Grund, C. & Pieperhoff, S. The area composita of adhering junctions connecting heart muscle cells of vertebrates. I. Molecular definition in intercalated disks of cardiomyocytes by immunoelectron microscopy of desmosomal p	human	IHC (frozen)
Janz A. et al. CRISPR/Cas9-edited PKP2 knock-out (JMU001-A-2) and DSG2 knock-out (JMU001-A-3) iPSC lines as an isogenic human model system for arrhythmogenic cardiomyopathy (ACM)., Stem Cell Res, 53, 102256, (2021).	human	IHC/IF, WB, FACS
Schäfer, S., Stumpp, S. & Franke, W. W. Immunological identification and characterization of the desmosomal cadherin Dsg2 in coupled and uncoupled epithelial cells and in human tissues. Differentiation. 60, 99–108 (1996).	human	WB
Schmelz, M. & Franke, W. W. Complexus adhaerentes, a new group of desmoplakin-containing junctions in endothelial cells: the syndesmos connecting retothelial cells of lymph nodes. Eur. J. Cell Biol. 61, 274–89 (1993).	human,rat,bovine	WB,IHC (frozen),ICC-IF,IEM
Imanishi, I. et al. Exfoliative toxin E, a new Staphylococcus aureus virulence factor with host-specific activity. Sci.Rep. 9, 16336 (2019)	mouse	IHC (frozen)