

Product datasheet

anti-Desmoplakin 1/2 mouse monoclonal, DP1 + 2-2.15, lyophilized, purified

Short overview

Cat. No.	61003
Quantity	50 µg
Concentration	50 µg/ml after reconstitution with 1 ml dist. water

Product description

Host	Mouse
Antibody Type	Monoclonal
Isotype	IgG1
Clone	DP1 + 2-2.15
Immunogen	Bovine desmoplakin 1 + 2
Formulation	Lyophilized; reconstitute in 1 ml dist. water (final solution contains 0.09% sodium azide, 0.5% BSA in PBS buffer, pH 7.4)
UniprotID	A0A3Q1MR22 (Bovine), P15924 (Human), E9Q557 (Mouse), F1LMV6 (Rat)
Synonym	Desmoplakin, DP, 250/210 kDa paraneoplastic pemphigus antigen, DSP
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, Chicken, Human, Mouse, Rat

Applications

Immunocytochemistry (ICC)	Assay dependent
Immunohistochemistry (IHC) - frozen	1:10-1:50
Immunohistochemistry (IHC) - paraffin	1:10-1:50 (microwave treatment recommended)
Western Blot (WB)	Assay dependent

Background

DP1 + 2-2.15 shows distinct punctate membrane staining of different epithelia. Tumors specifically detected: primary and metastatic carcinoma and meningioma. Polypeptides reacting: Desmoplakin 1 and 2 (Mr 250,000 and 215,000).

The epitope recognized by clone DP1 + 2-2.15 is mapped to the N-terminus of the rod domain (Bornslaeger, E. A., 1996). Bornslaeger, E. A.

Breaking the connection: displacement of the desmosomal plaque protein desmoplakin from cell-cell interfaces disrupts anchorage of

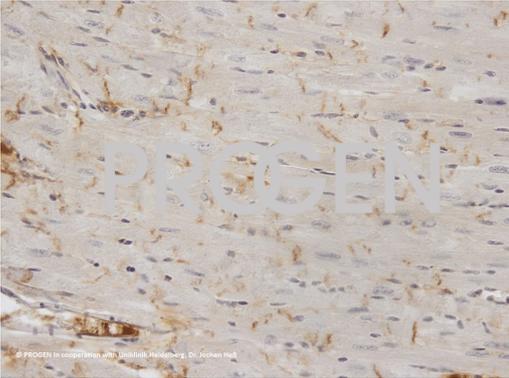
PROGEN Biotechnik GmbH | Maaßstraße 30 | D-69123 Heidelberg

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

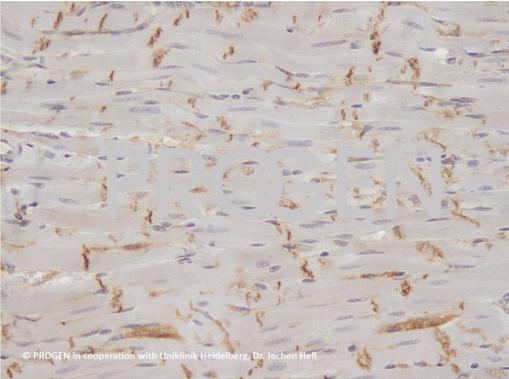
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intermediate filament bundles and alters intercellular junction assembly. J. Cell Biol. 134, 9851001 (1996).

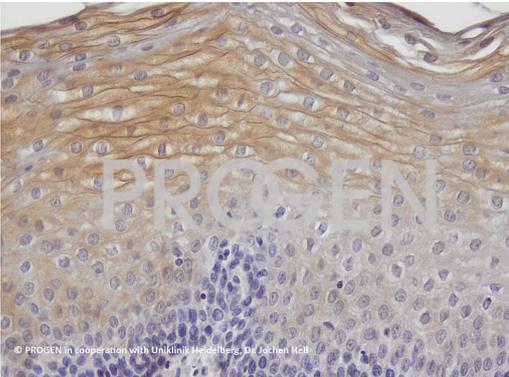
Product images



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



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



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

References

Publication	Species	Application
Schinner, C. et al. Stabilization of desmoglein-2 binding rescues arrhythmia in arrhythmogenic cardiomyopathy. JCI.Insight. 5. (2020)	mouse	WB
Shafraz, O. et al. E-cadherin binds to desmoglein to facilitate desmosome assembly. Elife. 7. (2018).	human	ICC-IF
Dedei, Z. et al. Cell autonomous role of iASPP deficiency in causing cardiocutaneous disorders. Cell.Death.Differ. 25, 1289-1303 (2018)	mouse	ICC-IF
Wallace, L., Roberts-Thompson, L. & Reichelt, J. Deletion of K1/K10 does not impair epidermal stratification but affects desmosomal structure and nuclear integrity. J. Cell Sci. 125, 1750-1758 (2012).	mouse	IHC (frozen)
Bosch, F. X., Andl, C., Abel, U. & Kartenbeck, J. E-cadherin is a selective and strongly dominant prognostic factor in squamous cell carcinoma: a comparison of E-cadherin with desmosomal components. Int. J. cancer 114, 779-90 (2005).	human	IHC (frozen)