# Product datasheet

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

### Short overview

| | |
|---|---|
| **Cat. No.** | 690003 |
| **Quantity** | 1 ml |
| **Concentration** | 50 µg/ml (50 µg) |

### Product description

| | |
|---|---|
| **Host** | Mouse |
| **Antibody Type** | Monoclonal |
| **Isotype** | IgG1 |
| **Clone** | DP1 + 2-2.15 |
| **Immunogen** | Bovine desmoplakin 1 + 2 |
| **Formulation** | PBS pH 7.4 with 0.09% sodium azide and 0.5% BSA |
| **UniprotID** | A0A3Q1MR22 (Bovine), P15924 (Human), E9Q557 (Mouse), F1LMV6 (Rat) |
| **Synomym** | Desmoplakin, DP, 250/210 kDa paraneoplastic pemphigus antigen, DSP |
| **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, Chicken, Human, Mouse, Rat |

### Applications

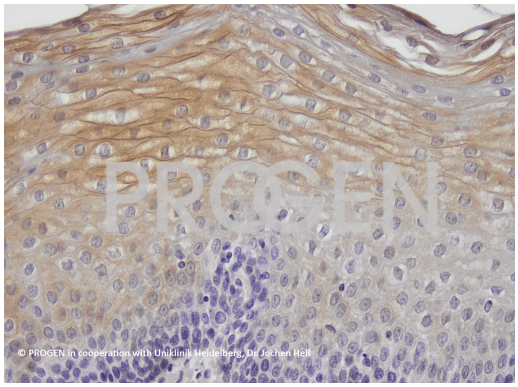
| | |
|---|---|
| **Immunocytochemistry (ICC)** | Assay dependent |
| **Immunohistochemistry (IHC) - frozen** | 1:10-1:50 (1-5 µg/ml) |
| **Immunohistochemistry (IHC) - paraffin** | 1:10-1:50 (1-5 µg/ml, microwave treatment recommended) |
| **Western Blot (WB)** | Assay dependent |

### Background

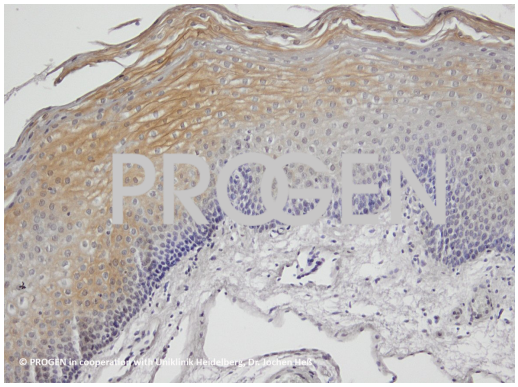
DP1 + 2-2.15 shows distinct punctate membrane staining of different epithelia. Tumors specifically detected: primary and metastatic carcinoma and meningioma. Polypeptides reacting: Desmoplakin 1 and 2 (Mr 250,000 and 215,000).

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

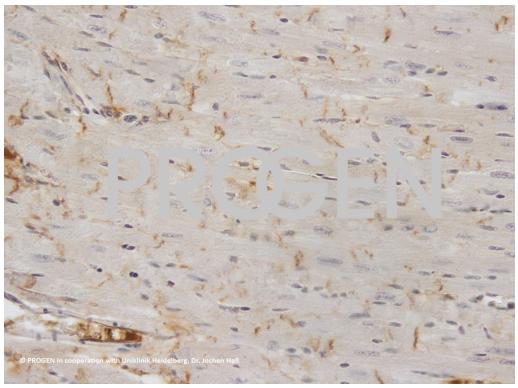
## Product images




IHC of human uvula (copyright: PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Hess)




IHC of human uvula (copyright: PROGEN in cooperation with Uniklinik Heidelberg, Dr. Jochen Hess)




IHC of mouse heart (copyright: 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,Â (2018). | human | ICC-IF |
| DedeiÄ‡, 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, 1750â€“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, 779â€“90 (2005). | human | IHC (frozen) |