

## Product datasheet

### anti-Desmocollin 3 mouse monoclonal, Dsc3-U114, liquid purified

#### Short overview

<b>Cat. No.</b>	690093
<b>Quantity</b>	1 ml
<b>Concentration</b>	50 µg/ml (50 µg)

#### Product description

<b>Host</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Clone</b>	Dsc3-U114
<b>Immunogen</b>	Synthetic peptide corresponding to a sequence present on the extracellular anchor domain of human desmocollin 3 (VHGAPFYFSLPNTSPEISRLWSLTKVC)
<b>Formulation</b>	PBS pH 7.4 with 0.09% sodium azide and 0.5% BSA
<b>UniprotID</b>	Q14574 (Human), P55292 (Mouse), D3ZZI6 (Rat)
<b>Synonym</b>	Desmocollin-3, Cadherin family member 3, Desmocollin-4, HT-CP, DSC3, CDHF3, DSC4
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Affinity chromatography
<b>Storage</b>	Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
<b>Intended use</b>	Research use only
<b>Application</b>	IHC, WB
<b>Reactivity</b>	Human, Mouse, Rat
<b>No reactivity</b>	Bovine

#### Applications

<b>Immunohistochemistry (IHC) - frozen</b>	1:10-1:100 (0.5-5 µg/ml, for better resolution preincubation (directly after fixation) with 0.05-0.2% Triton X-100, for 5-10 min, depending on tissue type, is recommended )
<b>Immunohistochemistry (IHC) - paraffin</b>	1:10-1:100 (0.5-5 µg/ml, microwave treatment recommended)
<b>Western Blot (WB)</b>	Assay dependent

#### Background

The mouse monoclonal antibody localizes Dsc3 present in

- All living epidermal layers

- In glandular duct cells

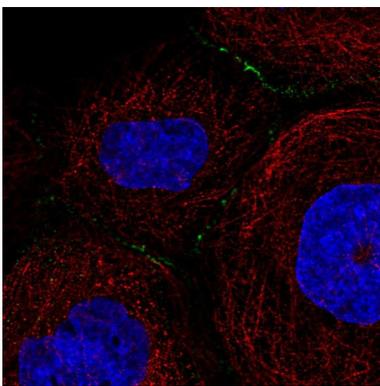
- In basal matrix cells and outer root sheath of hair follicles

- Basal and suprabasal cell layers of stratified epithelia (e.g. vagina, tongue, esophagus), basal layer of bladder urothelium and complex epithelium of trachea

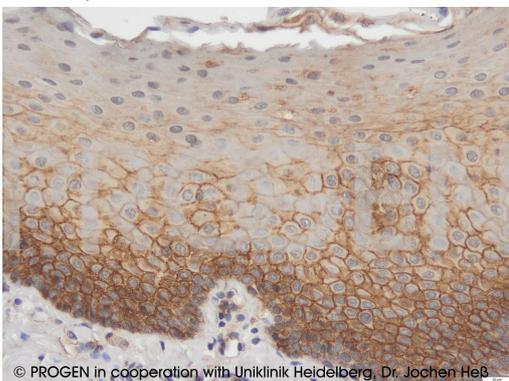
- Thymic reticulum cells

All simple epithelia are negative. Intercalated disks of myocardium are negative. Polypeptide reacting: 109 kDa and 100 kDa polypeptides (desmocollin 3 splice isoforms at pI 5.2) from human epidermal desmosomes. Reactivity on cultured cell lines: most cultured cell lines derived from stratified squamous epithelia or squamous cell carcinomas are positive (e.g. A-431, HaCaT).

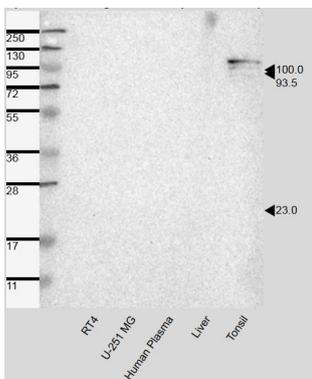
## Product images



Desmocollin 3 staining on A431 cells (courtesy of The Human Protein Atlas, [www.proteinatlas.org](http://www.proteinatlas.org), Thul PJ et al, 2017. A subcellular map of the human proteome. Science)



IHC of human oral mucosa with anti-Desmocollin 3 (1:10, courtesy of J.Heß, University Hospital Heidelberg)



Western blot with anti-Desmocollin 3 on various tissues (courtesy of The Human Protein Atlas, [www.proteinatlas.org](http://www.proteinatlas.org), Thul PJ et al, 2017. A subcellular map of the human proteome. Science)

## References

Publication	Species	Application
<a href="#">Peter J Koch, Saiphone Webb, Jessica A Gugger, Maddison N Salois, Maranke I Koster. Differentiation of Human Induced Pluripotent Stem Cells into Keratinocytes., Curr Protoc 2, e408, (2022)</a>	human	WB
<a href="#">Wanuske, M. T. et al. Clustering of desmosomal cadherins by desmoplakin is essential for cell-cell adhesion., Acta Physiol (Oxf) 231, e13609, (2021).</a>	human	ICC-IF, IP, WB
<a href="#">Kudo, I. et al. Particular gene upregulation and p53 heterogeneous expression in TP53-mutated maxillary carcinoma. Oncol.Lett. 14, 4633-4640 (2017).</a>	human	IHC (paraffin)
<a href="#">Khan, K. et al. Desmocollin switching in colorectal cancer. Br. J. Cancer 95, 1367-1370 (2006).</a>	human	WB,IHC (paraffin)
<a href="#">Akat, K. et al. Molecular characterization of desmosomes in meningiomas and arachnoidal tissue. Acta Neuropathol. 106, 337-347 (2003).</a>	human	WB,IHC (frozen)