

## Datasheet: MCA2273T

<b>Description:</b>	MOUSE ANTI HUMAN DESMOGLEIN 3
<b>Specificity:</b>	DESMOGLEIN 3
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	5G11
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 µg

## Product Details

**RRID** AB\_2093447

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			1/100 - 1/1000
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) **This product requires protein digestion pre-treatment of paraffin sections e.g. pepsin (See [Wu et al](#)). Alternatively it is reported that staining of FFPE material may be enhanced using protein digestion with e.g. pronase, followed by HIER in citrate buffer.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml
<b>Immunogen</b>	Recombinant human desmoglein 3.

**External Database  
Links**

**UniProt:**

[P32926](#)   [Related reagents](#)

**Entrez Gene:**

[1830](#)   DSG3   [Related reagents](#)

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**Synonyms**

CDHF6

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**Fusion Partners**

Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.

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**Specificity**

**Mouse anti Human Desmoglein 3 antibody, clone 5G11** recognizes human desmoglein-3, also known as 130 kDa pemphigus vulgaris antigen or Cadherin family member 6. Desmoglein-3 is a 999 amino acid ~125 kDa single pass type I transmembrane glycoprotein, a core component of the desmosome cell-cell junction between epithelial cells.

Desmoglein-3 is synthesized in the basal and lower suprabasal layers of the skin.

Mouse anti Human Desmoglein 3 antibody, clone 5G11 does not recognise desmoglein-1 or desmoglein-2.

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**Histology Positive  
Control Tissue**

Skin

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**Western Blotting**

MCA2273 detects a band of approximately 125kDa in epithelial cell lysates.

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**References**

1. Wahl, J.K. 3rd (2002) Generation of monoclonal antibodies specific for desmoglein family members. [Hybrid Hybridomics. 21 \(1\): 37-44.](#)
2. Wu, H/ *et al.* (2000) Protection against pemphigus foliaceus by desmoglein 3 in neonates. [N Engl J Med. 343 \(1\): 31-5.](#)
3. Wan, H. *et al.* (2007) Increased keratinocyte proliferation initiated through downregulation of desmoplakin by RNA interference. [Exp Cell Res. 313: 2336-44.](#)
4. Szegedi, A. *et al.* (2008) Protein kinase C isoenzymes differentially regulate the differentiation-dependent expression of adhesion molecules in human epidermal keratinocytes. [Exp Dermatol. 18: 122-9.](#)
5. O'Shea, C. *et al.* (2014) Desmosomal defects in acantholytic squamous cell carcinomas. [J Cutan Pathol. 41 \(11\): 873-9.](#)
6. Völlner, F. *et al.* (2016) Loss of flotillin expression results in weakened desmosomal adhesion and Pemphigus vulgaris-like localisation of desmoglein-3 in human keratinocytes. [Sci Rep. 6: 28820.](#)

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**Further Reading**

1. Koch, P.J. *et al.* (1998) Desmoglein 3 anchors telogen hair in the follicle. [J Cell Sci. 111 \( Pt 17\): 2529-37.](#)
2. Jolly, P.S. *et al.* (2010) p38MAPK signaling and desmoglein-3 internalization are linked events in pemphigus acantholysis. [J Biol Chem. 285: 8936-41.](#)

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend

microcentrifugation before use.

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<b>Guarantee</b>	18 months from date of despatch.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),  
[DyLight®800](#), [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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