

## Datasheet: MCA2273

<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>	0.2 mg

## Product Details

### 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 product 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 product 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 (Wu et al. 2000). 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>Preparation</b>	Antibody purified from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	<0.1%% sodium azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml
<b>Immunogen</b>	Recombinant human desmoglein 3.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P32926</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">1830</a>    DSG3    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CDHF6
<b>RRID</b>	AB_2246054
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human Desmoglein 3 antibody, clone 5G11</b> 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.</p> <p>Desmoglein-3 is synthesized in the basal and lower suprabasal layers of the skin.</p> <p>Mouse anti Human Desmoglein 3 antibody, clone 5G11 does not recognise desmoglein-1 or desmoglein-2.</p>
<b>Histology Positive Control Tissue</b>	Human skin
<b>Western Blotting</b>	Mouse anti human desmoglein 3 antibody, clone 5G11 detects a band of approximately 125 kDa in epithelial cell lysates.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Wu, H/ <i>et al.</i> (2000) Protection against pemphigus foliaceus by desmoglein 3 in neonates. <a href="#">N Engl J Med. 343 (1): 31-5.</a></li> <li>2. Wahl, J.K. 3rd (2002) Generation of monoclonal antibodies specific for desmoglein family members. <a href="#">Hybrid Hybridomics. 21 (1): 37-44.</a></li> <li>3. Wan, H. <i>et al.</i> (2007) Increased keratinocyte proliferation initiated through downregulation of desmoplakin by RNA interference. <a href="#">Exp Cell Res. 313: 2336-44.</a></li> <li>4. Szegedi, A. <i>et al.</i> (2008) Protein kinase C isoenzymes differentially regulate the differentiation-dependent expression of adhesion molecules in human epidermal keratinocytes. <a href="#">Exp Dermatol. 18: 122-9.</a></li> <li>5. O'Shea, C. <i>et al.</i> (2014) Desmosomal defects in acantholytic squamous cell</li> </ol>

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.](#)

7. Kurrle, N. *et al.* (2013) Flotillins directly interact with  $\gamma$ -catenin and regulate epithelial cell-cell adhesion. [PLoS One. 8 \(12\): e84393.](#)

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<b>Further Reading</b>	1. Koch, P.J. <i>et al.</i> (1998) Desmoglein 3 anchors telogen hair in the follicle. <a href="#">J Cell Sci. 111 ( Pt 17): 2529-37.</a> 2. Jolly, P.S. <i>et al.</i> (2010) p38MAPK signaling and desmoglein-3 internalization are linked events in pemphigus acantholysis. <a href="#">J Biol Chem. 285: 8936-41.</a>
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<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2273">https://www.bio-rad-antibodies.com/SDS/MCA2273</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### 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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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