

## Datasheet: MCA2273T

**BATCH NUMBER 160519**

<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

### 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.
<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_2093447
<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>	Skin
<b>Western Blotting</b>	MCA2273 detects a band of approximately 125kDa in epithelial cell lysates.
<b>References</b>	<ol style="list-style-type: none"> <li>1. 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>2. 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>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 carcinomas. <a href="#">J Cutan Pathol. 41 (11): 873-9.</a></li> </ol>

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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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2273T>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

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