

Datasheet: MCA2273

Description:	MOUSE ANTI HUMAN DESMOGLEIN 3
Specificity:	DESMOGLEIN 3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	5G11
Isotype:	lgG1
Quantity:	0.2 mg

## **Product Details**

**RRID** AB\_2246054

#### **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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 (See <u>Wu et al</u>). 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.

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

External Database Links	UniProt: P32926 Related reagents  Entrez Gene: 1830 DSG3 Related reagents
Synonyms	CDHF6
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.
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.
Histology Positive Control Tissue	Skin.
References Further Reading	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. Note 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.  1. Koch, P.J. et al. (1998) Desmoglein 3 anchors telogen hair in the follicle. J Cell Sci. 111 ( Pt 17): 2529-37.
	<ul> <li>2529-37.</li> <li>2. Jolly, P.S. <i>et al.</i> (2010) p38MAPK signaling and desmoglein-3 internalization are linked events in pemphigus acantholysis. J Biol Chem. 285: 8936-41.</li> </ul>
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.

# **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...) <u>DyLight®800</u>

Rabbit Anti Mouse IgG (STAR13...)

Goat Anti Mouse IgG (STAR76...)

Goat Anti Mouse IgG (STAR70...)

Goat Anti Mouse IgG (Fc) (STAR120...)

Rabbit Anti Mouse IgG (STAR9...)

FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®680,

Worldwide

DyLight®800, FITC, HRP

### **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody\_sales\_us@bio-rad.com

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

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'M345209:190125'

#### Printed on 11 Oct 2019

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