

Datasheet: MCA2273

BATCH NUMBER 161161

Description:	MOUSE ANTI HUMAN DESMOGLEIN 3
Specificity:	DESMOGLEIN 3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	5G11
Isotype:	IgG1
Quantity:	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.

	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 [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.

Target Species	Human
Product Form	Purified IgG - liquid
Buffer Solution	Phosphate buffered saline
Preservative	<0.1% Sodium Azide (NaN ₃)

Stabilisers

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

RRID AB_2246054

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

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.](#)

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.](#)

Storage

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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2273>
10040

Regulatory For research purposes only

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

North & South America Tel: +1 800 265 7376

Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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