

Datasheet: MCA2273T

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

	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 (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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Antibody purified from tissue culture supernatant
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Recombinant human desmoglein 3.
External Database Links	<p>UniProt: P32926 Related reagents</p> <p>Entrez Gene: 1830 DSG3 Related reagents</p>
Synonyms	CDHF6
RRID	AB_2093447
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	<p>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.</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>
Histology Positive Control Tissue	Human skin
Western Blotting	Mouse anti human desmoglein 3 antibody, clone 5G11 detects a band of approximately 125 kDa in epithelial cell lysates.
References	<ol style="list-style-type: none"> 1. Wu, H/ <i>et al.</i> (2000) Protection against pemphigus foliaceus by desmoglein 3 in neonates. N Engl J Med. 343 (1): 31-5. 2. Wahl, J.K. 3rd (2002) Generation of monoclonal antibodies specific for desmoglein family members. Hybrid Hybridomics. 21 (1): 37-44. 3. Wan, H. <i>et al.</i> (2007) Increased keratinocyte proliferation initiated through downregulation of desmoplakin by RNA interference. Exp Cell Res. 313: 2336-44. 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. Exp Dermatol. 18: 122-9. 5. O'Shea, C. <i>et al.</i> (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.](#)

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

Further Reading	1. Koch, P.J. <i>et al.</i> (1998) Desmoglein 3 anchors telogen hair in the follicle. J Cell Sci. 111 (Pt 17): 2529-37. 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.
------------------------	--

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/MCA2273T 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

Recommended Negative Controls

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

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
----------------------------------	---	------------------	---	---------------	---

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

'M413891:221129'

Printed on 18 Apr 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)