

Datasheet: MCA2273T

BATCH NUMBER 180702

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 (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 Stabilisers	0.09% Sodium Azide
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	Skin
Western Blotting	MCA2273 detects a band of approximately 125kDa in epithelial cell lysates.
References	<ol style="list-style-type: none"> 1. Wahl, J.K. 3rd (2002) Generation of monoclonal antibodies specific for desmoglein family members. Hybrid Hybridomics. 21 (1): 37-44. 2. Wu, H/ <i>et al.</i> (2000) Protection against pemphigus foliaceus by desmoglein 3 in neonates. N Engl J Med. 343 (1): 31-5. 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.](#)

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 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.

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](#)

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