

## Datasheet: MCA2272T BATCH NUMBER 166667

Description:	MOUSE ANTI HUMAN DESMOGLEIN 2
Specificity:	DESMOGLEIN 2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	6D8
Isotype:	lgG1
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 r	ecommer	ndations, please visit <u>w</u>	ww.bio-
	rad-antibodies.com/protocols.				
		Yes	No	Not Determined	Suggested Dilution
	Flow Cytometry			•	
	Immunohistology - Frozen	-			
	Immunohistology - Paraffin			•	
	ELISA			•	
	Immunoprecipitation	-			
	Western Blotting	-			1/100 - 1/1000
	Where this product has n	not been t	ested for	use in a particular tech	nique this does not
	necessarily exclude its us	se in sucł	n procedu	res. Suggested workin	dilutions are given as
	a guide only. It is recomm		•		•
	system using appropriate			•	
	system doing appropriate	negative	/positive		
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 (Na	N <sub>3</sub> )			
Approx. Protein Concentrations	IgG concentration 0.5 mg	g/ml			

Immunogen	A-431 cell membranes.
External Database Links	UniProt: Q14126 Related reagents
	Entrez Gene:
	1829 DSG2 Related reagents
Synonyms	CDHF5
RRID	AB_2261758
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	<ul> <li>Mouse anti Human desmoglein 2 monoclonal antibody, clone 6D8 recognizes human desmoglein 2, a single pass type 1 membrane glycoprotein with 4 extracellular <u>cadherin</u> domains and six cytoplasmic desmoglein repeat sequences, with a predicted molecular weight of ~122 kDa and an apparent molecular weight of ~160-165 kDa, due to post translational modification. Desmoglein 2 is a core component of the <u>desmosome</u> cell-cell junction between epithelial cells.</li> <li>Mouse anti human desmoglein 2, clone 6D8 has been used for the study of the interaction between desmoglein 2 and adenoviruses which exploit desmoglein 2 as a receptor for</li> </ul>
	infection ( <u>Wang <i>et al.</i> 2013</u> ). Mouse anti Human desmoglein 2 monoclonal antibody, clone 6D8 recognizes a region encompassing a portion of extracellular domains 3 and 4 ( <u>Kolegraff <i>et al.</i> 2011</u> ) and does not recognize desmoglein-1 or desmoglein-3 ( <u>Wahl <i>et al.</i> 2002</u> ).
Histology Positive Control Tissue	Human skin
Western Blotting	Mouse anti Human desmoglein 2 antibody, clone 6D8 detects a band of approximately 165 kDa in A-431 cell lysates.
References	<ol> <li>Ishii, K. <i>et al.</i> (2001) Assembly of desmosomal cadherins into desmosomes is isoform dependent. <u>J Invest Dermatol. 117 (1): 26-35.</u></li> <li>Wahl, J.K. 3rd (2002) Generation of monoclonal antibodies specific for desmoglein family members. <u>Hybrid Hybridomics. 21 (1): 37-44.</u></li> <li>Sobolik-Delmaire, T. <i>et al.</i> (2006) Carboxyl terminus of Plakophilin-1 recruits it to plasma membrane, whereas amino terminus recruits desmoplakin and promotes desmosome assembly. <u>J Biol Chem. 281 (25): 16962-70.</u></li> <li>Hemmoranta, H. <i>et al.</i> (2006) Transcriptional profiling reflects shared and unique characters for CD34+ and CD133+ cells. <u>Stem Cells Dev. 15: 839-51.</u></li> <li>Nava, P. <i>et al.</i> (2007) Desmoglein-2: a novel regulator of apoptosis in the intestinal epithelium. <u>Mol Biol Cell. 18: 4565-78.</u></li> </ol>

Regulatory	For research purposes only
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2272T 10040
Guarantee	12 months from date of despatch
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store a -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.
	<ul> <li>desmosomes of Dsg3 and differ in their Dsg3-depleting activities related to pathogenicity J Biol Chem. 282: 17866-76.</li> <li>7. Keim, S.A. <i>et al.</i> (2008) Generation and characterization of monoclonal antibodies against the proregion of human desmoglein-2. Hybridoma (Larchmt). 27 (4): 249-58.</li> <li>8. Todorović, V. <i>et al.</i> (2010) Detection of differentially expressed basal cell proteins by mass spectrometry. Mol Cell Proteomics. 9 (2): 351-61.</li> <li>9. Gornowicz-Porowska, J. <i>et al.</i> (2011) Loss of correlation between intensities of desmoglein 2 and desmoglein 3 expression in basal cell carcinomas. Acta Dermatovenerol Croat. 19: 150-5.</li> <li>10. Brennan, D. <i>et al.</i> (2012) A role for caveolin-1 in desmoglein binding and desmosom dynamics. Oncogene. 31 (13): 1636-48.</li> <li>11. Wang, H. <i>et al.</i> (2012) A new human DSG2-transgenic mouse model for studying the tropism and pathology of human adenoviruses. J Virol. 86 (11): 6286-302.</li> <li>12. Wang, H. <i>et al.</i> (2013) Structural and functional studies on the interaction of adenovirus fiber knobs and desmoglein 2. J Virol. 87 (21): 11346-62.</li> <li>13. Pietkiewicz, P. <i>et al.</i> (2014) Discordant expression of desmoglein 2 and 3 at the mRN and protein levels in nodular and superficial basal cell carcinoma revealed by immunohistochemistry and fluorescent <i>in situ</i> hybridization. Clin Exp Dermatol. 39 (5): 628-35.</li> <li>14. Wang, H. <i>et al.</i> (2015) Intracellular Signaling and Desmoglein 2 Shedding Triggered Human Adenoviruses Ad3, Ad14, and Ad14P1. J Virol. 89 (21): 10841-59.</li> <li>15. Yumul, R. <i>et al.</i> (2016) Epithelial Junction Opener Improves Oncolytic Adenovirus Therapy in Mouse Tumor Models. Hum Gene Ther. 27 (4): 325-37.</li> <li>16. Kim, J. <i>et al.</i> (2020) Desmoglein-2 as a prognostic and biomarker in ovarian cancer. Cancer Biol Ther. : 1-9.</li> </ul>

## **Related Products**

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77)	<u>HRP</u>
Rabbit Anti Mouse IgG (STAR12)	<u>RPE</u>

Goat Ant	i Mouse IgG (STAR70)	<u>FIT(</u>	<u>C</u>			
Goat Ant	Goat Anti Mouse IgG IgA IgM (STAR87) <u>Alk. Phos.</u> , <u>HRP</u>					
Goat Ant	Goat Anti Mouse IgG (STAR76) RPE					
Goat Ant	i Mouse IgG (H/L) (STAR117)	117) Alk. Phos., DyLight®488, DyLight®550,				
		DyL	ight®650, DyLight®68	0, DyLight®80	<u>)0</u> ,	
		FIT(	<u>C, HRP</u>			
Goat Anti Mouse IgG (Fc) (STAR120) <u>FITC</u> , <u>HRP</u>						
Rabbit A	Rabbit Anti Mouse IgG (STAR13) <u>HRP</u>					
Rabbit A	Rabbit Anti Mouse IgG (STAR9) FITC					
Recommended Negative Controls						
MOUSE IgG1 NEGATIVE CONTROL (MCA928)						
North & South	Tel: +1 800 265 7376 Worldwid	de	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21	
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50	
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio	-rad.com	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 'M415504:230105'						

Printed on 19 Jan 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint