Desmoglein-1 Monoclonal Mouse Antibody (27B2)

Product Description

This antibody recognizes a protein of ~150 kDa, identified as Desmoglein-1 (DSG1). Desmoglein-1 is a member of the desmosomal cadherin family. Desmosomes are intercellular adhering junctions that represent cell surface attachment sites for intermediate filament. Desmocollins and desmogleins are the main desmosomal transmembrane proteins. Desmogleins consist of Dsg1, Dsg2, Dsg3, and Dsg4 isoforms. Within the desmosome, the extracellular domain of desmoglein is essential for calcium dependent heterophilic binding to the desmocollins, whereas the intracellular domain is essential for binding to the desmosomal plaque protein, plakoglobin. Desmoglein 1 is synthesized exclusively in the suprabasal layers. Intact and functionally active desmoglein 1 is essential to epidermal integrity.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1436, Anti-Desmoglein-1 (27B2)

Cell/tissue expression

Product attributes				
Antibody number	#1436			
Antibody reactivity (target)	Desmoglein-1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	27B2			
Isotype	IgG1, kappa			
Molecular weight	150 kDa (precursor); 160 kDa (mature)			
Synonyms	Cadherin family member 4; CDHF4; Desmoglein-1; Desmosomal glycoprotein 1; DG1; DSG1; EPKHE; EPKHIA; Pemphigus foliaceus antigen; PPKS1; SPPK1			
Human gene symbol	DSG1			
Entrez gene ID	1828			
SwissProt	Q02413			
Unigene	2633			
Immunogen	Human desmoglein-1 intracellular domain (exact sequence is proprietary)			
Antibody target cellular localization	Plasma membrane			
Species reactivity	Human			
Expected antibody applications	WB (published), IHC (FFPE) (published for clone), IF (published for clone)			
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal diultion for a specific application should be determined by user			
Positive control	A431 or A-375 cells. Skin			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/free: 1 mg/mL i PBS without azide			
Antibody research areas	Cell adhesion			
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.			

Epidermal cells

Call us: 800-304-5357 Email: btinfo@biotium.com

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- 1. New England J Med (2000) 343:31-35. (IHC, FFPE)
- 2. Br J Dermatol (2011) 165:552-562. (IF) 3. J Inv Dermatol (2003) 120(6): 1052-1057. (IF)
- 4. Mol Biol Cell (2010) 21: 3902-3914. (WB)