Desmoglein-2 Monoclonal Mouse Antibody (8E5)

Product Description

This antibody recognizes a protein of 165 kDa, identified as Desmoglein-2 (DSG2). This monoclonal antibody This antibody recognizes the extracellular domain of human desmoglein-2. Desmoglein-2 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. Human Desmoglein-2 is a type I transmembrane glycoprotein of 1117 amino acid (aa) residues with a 23 aa signal peptide and a 25 aa propeptide. It differs from other classic cadherins by having four instead of five cadherin repeat domains in its extracellular region, and a much larger cytoplasmic region containing five desmoglein repeat domains which share homology with the cadherin repeats. Instead of having the HAV adhesion motif found in type I cadherins, desmogleins have R/YAL as the adhesion motif on its amino-terminal cadherin repeat. The cytoplasmic tails of desmogleins interact with desmoplakins, plakoglobin and plakophilins. In turn, these proteins link the desmogleins with the intermediate filaments. Desmoglein-2 has been shown to be important in establishing cell-cell adhesion and function in epithelial cells. Desmoglein2 was originally identified in colon carcinoma and colon, and was named HDGC (human desmoglein colon).

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 1438, Anti-Desmoglein-2 (8 E5)

Product attributes

Tumor expression

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Product attributes				
Antibody number	#1438			
Antibody reactivity (target)	Desmoglein-2			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	8E5			
Isotype	IgG1, kappa			
Molecular weight	ght ~165 kDa			
Synonyms	ARVC10; ARVD10; Cadherin family member 5; CDHF5; CMD1BB; Desmoglein-2; DSG2; HDGC; Human Desmoglein Colon			
Human gene symbol	DSG2			
Entrez gene ID 1829				
SwissProt	Q14126			
Unigene	412597			
Immunogen	Recombinant human full-length DSG2 protein			
Antibody target cellular Plasma membrane ocalization				
Expected antibody applications				
Species reactivity	Human			
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 dilution for a specific application should be determined by user			
Positive control	ug/mL, Optimal dilution for a specific application should be			
Positive control Shipping condition	ug/mL, Optimal dilution for a specific application should be determined by user			
	ug/mL, Optimal dilution for a specific application should be determined by user A431, HepG2 or K562 cells. Heart or Colon			
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Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate formulation	ug/mL, Optimal dilution for a specific application should be determined by user A431, HepG2 or K562 cells. Heart or Colon Room temperature Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C Guaranteed for at least 24 months from date of receipt when stored as recommended For research use only (RUO) Conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 1 mg/mL in PBS without azide			

Colorectal cancer

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. Nat Med (2011) 17(1): 96-104. (functional studies)
- 2. J Virol (2011) 85(13): 6390-6402. (functional studies)