

# Desmoglein-3 Monoclonal Mouse Antibody (5H10)

## Product Description

This antibody recognizes a protein of 130 kDa, identified as Desmoglein-3 (DSG3). This MAb is highly specific to Desmoglein-3 and does not cross-react with other members of the Desmoglein-family. DSG3 is a calcium-binding transmembrane glycoprotein component of desmosomes in vertebrate epithelial cells. Research has shown that DSG3 has a very high sensitivity (>80%) and specificity (100%) in recognizing squamous cell carcinoma (SqCC). Therefore, DSG3 is considered a very important marker for lung SqCC and can be a useful ancillary marker to separate SqCC from other subtypes of lung cancer. Moreover, studies have shown that DSG3 expression in lung SqCC may indicate a poor prognosis. 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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 1440, Anti-Desmoglein-3 (5H10)**

## References

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

1. J Clin Invest (1998) 102:775-782. (WB)
2. J Inv Dermatol (2002) 118(5): 845-850. (IF)
3. PLoS One 5(12): e142111. (IP)
4. J Cell Sci (2003) 116: 4239-4248. (Flow, surface)

### Product attributes

Antibody number	#1440
Antibody reactivity (target)	Desmoglein-3
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	5H10
Isotype	IgG1, kappa
Molecular weight	130 kDa
Synonyms	Pemphigus vulgaris antigen (PVA); Balding (Bal); Cadherin family member 6 (CDHF6); Desmoglein-3 (DSG3)
Human gene symbol	DSG3
Entrez gene ID	1830
SwissProt	P32926
Unigene	1925
Immunogen	Recombinant human DSG3 extracellular protein fragment (exact sequence is proprietary)
Antibody target cellular localization	Plasma membrane
Expected antibody applications	Immuofluorescence (published for clone), Flow, surface (published for clone), IP (published for clone), WB (published for clone)
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	A431 cells.
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/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Cell adhesion
Cell/tissue expression	Epithelial cells
Tumor expression	Squamous cell carcinoma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
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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