

Product Datasheet

Desmoglein-3 Antibody (5G11) - BSA Free NB100-1643

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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NB100-1643

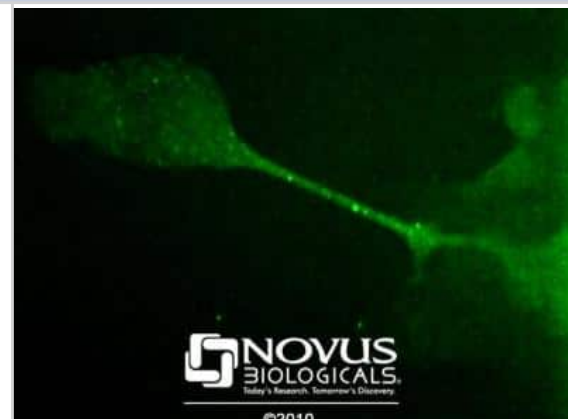
Desmoglein-3 Antibody (5G11) - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	5G11
Preservative	0.02% Sodium Azide
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS
Product Description	
Description	Novus Biologicals Mouse Desmoglein-3 Antibody (5G11) - BSA Free (NB100-1643) is a monoclonal antibody validated for use in IHC, WB, Flow, ICC/IF and IP. Anti-Desmoglein-3 Antibody: Cited in 6 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	1830
Gene Symbol	DSG3
Species	Human
Specificity/Sensitivity	This antibody reacts with Desmoglein-3. Does not cross-react with Desmoglein 1 or Desmoglein 2.
Immunogen	Partial recombinant Human Desmoglein 3 protein expressed in baculovirus (amino acids 1-615)[UniProt# P32926]
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Dot Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation
Recommended Dilutions	Western Blot 1:500 - 1:1000, Flow Cytometry 1 ug per million cells, Immunohistochemistry 1:200, Immunocytochemistry/ Immunofluorescence 1:100, Immunoprecipitation 1:10 - 1:500, Immunohistochemistry-Paraffin 1:200, Dot Blot reported in scientific literature (PMID 15588331)



Images

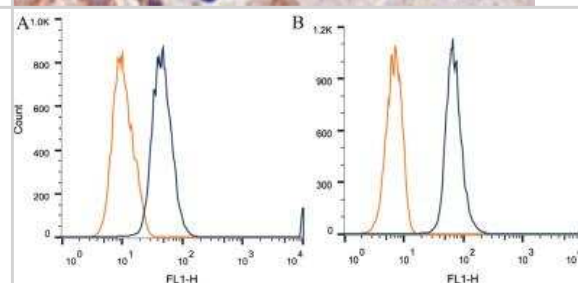
Immunocytochemistry/Immunofluorescence: Desmoglein-3 Antibody (5G11) [NB100-1643] - Analysis of Desmoglein-3 in A-431 cells.



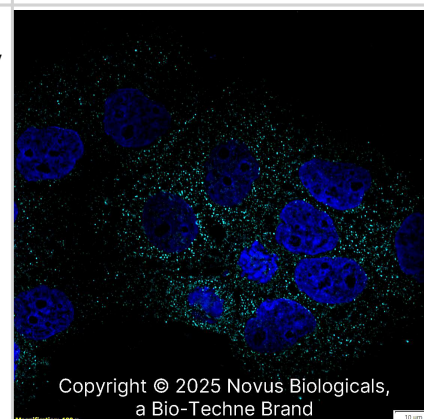
Immunohistochemistry: Desmoglein-3 Antibody (5G11) [NB100-1643] - Analysis of Desmoglein-3 on human skin cancer. NB100-1643 was used at a dilution of 1:200.



Flow Cytometry: Desmoglein-3 Antibody (5G11) [NB100-1643] - Intracellular flow cytometric staining of 1×10^6 CHO (A) and HEK-293 (B) cells using Desmoglein-3 antibody (dark blue). Isotype control shown in orange. An antibody concentration of $1 \mu\text{g}/1 \times 10^6$ cells was used.



Desmoglein-3 Antibody (5G11) was detected in immersion fixed A431 human skin carcinoma cell line using Mouse anti-Desmoglein-3 Antibody (5G11) Protein G Purified Monoclonal Antibody conjugated to Alexa Fluor® 488 (Catalog # NB100-1643AF647) ($10 \mu\text{g}/\text{mL}$) overnight at 4°C . Cells were counterstained with DAPI (blue). Cells were imaged using a 100X objective and digitally deconvolved.



Publications

Griffin JR, Wriston CC, Peters MS, Lehman JS. Decreased expression of intercellular adhesion molecules in acantholytic squamous cell carcinoma compared with invasive well-differentiated squamous cell carcinoma of the skin *Am J Clin Pathol* 2013-04-01 [PMID: 23525614]

Roden AC, Yi ES, Cassivi SD et al. Clinicopathological features of thymic carcinomas and the impact of histopathological agreement on prognostical studies *Eur J Cardiothorac Surg* 2012-10-19 [PMID: 23086701] (IF/IHC, Human)

Wahl JK 3rd. Generation of monoclonal antibodies specific for desmoglein family members. *Hybrid Hybridomics*. 21 (1):37-44. 2002-02-01 [PMID: 11991815]

Wu H, Wang ZH, Yan A, Lyle S, Fakharzadeh S, Wahl JK, Wheelock MJ, Ishikawa H, Uitto J, Amagai M, Stanley JR. Protection against pemphigus foliaceus by desmoglein 3 in neonates. *N Engl J Med*;343(1):31-5. 2000-07-06 [PMID: 10882766] (ICC/IF, Human)

Lucchese A, Mittelman A, Lin MS, Kanduc D, Sinha AA. Epitope definition by proteomic similarity analysis: identification of the linear determinant of the anti-Dsg3 MAb 5H10. *J Transl Med*. 2(1):43. 2004-12-11 [PMID: 15588331] (Cytometric Bead Assay Standard, Human)

Wu H, Stanley JR, Cotsarelis G. Desmoglein isotype expression in the hair follicle and its cysts correlates with type of keratinization and degree of differentiation. *J Invest Dermatol*. 2003-01-01 [PMID: 12787134] (ICC/IF, IF/IHC, Human)



Procedures

IHC Protocol Specific for Desmoglein 3 Antibody (5G11)

Desmoglein-3 Antibody (5G11):

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.



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Products Related to NB100-1643

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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