

# Product Datasheet

## Desmoglein-2 Antibody ([8E5]) [PE/Cy7] NBP2-54529PECY7

Unit Size: 0.1 ml

Store at 4C in the dark. Do not freeze.

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**NBP2-54529PECY7**

Desmoglein-2 Antibody ([8E5]) [PE/Cy7]

| Product Information         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit Size                   | 0.1 ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Concentration               | Please see the vial label for concentration. If unlisted please contact technical services.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Storage                     | Store at 4C in the dark. Do not freeze.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Clonality                   | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Clone                       | [8E5]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Preservative                | 0.05% Sodium Azide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Isotype                     | IgG1 Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Conjugate                   | PE/Cy7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Purity                      | Protein A or G purified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Buffer                      | PBS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Product Description         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Host                        | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Gene ID                     | 1829                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Symbol                 | DSG2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Species                     | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Specificity/Sensitivity     | Recognizes a protein of 165kDa, identified as Desmoglein-2 (DSG2). This monoclonal 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). |
| Immunogen                   | Recombinant human Desmoglein-2 protein (Uniprot: Q14126)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Product Application Details |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Applications                | Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, CyTOF-ready                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Recommended Dilutions       | Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, CyTOF-ready                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



**Application Notes**

Optimal dilution of this antibody should be experimentally determined. For optimal results using our Tandem dyes, please avoid prolonged exposure to light or extreme temperature fluctuations. These can lead to irreversible degradation or decoupling. When staining intracellular targets, specific attention to the fixation and permeabilization steps in your flow protocol may be required. Please contact our technical support team at [technical@novusbio.com](mailto:technical@novusbio.com) if you have any questions.





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### **Products Related to NBP2-54529PECY7**

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|               |                                          |
|---------------|------------------------------------------|
| NBP1-85709PEP | Desmoglein-2 Recombinant Protein Antigen |
| 243-B3-002    | TGF-beta 3 [Unconjugated]                |
| 947-DM-100    | Desmoglein-2                             |
| AF748         | E-Cadherin Antibody [Unconjugated]       |

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### **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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