

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Desmoglein-1 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 129209
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Desmoglein-1 Glu50-His545 Accession # Q02413
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Desmoglein-1 is one of three members of the desmoglein subfamily of calcium-dependent cadherin cell adhesion molecules. Together with desmocollins, another subfamily within the cadherin superfamily, the desmoglein isoforms form the adhesive components of desmosomes, the cell-cell adhesive structures that are found in epithelial cells. Human Desmoglein-1 is a type I transmembrane glycoprotein of 1049 amino acid (aa) residues with a 23 aa signal peptide and a 26 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, Desmoglein-1 has R/YAL as the adhesion motif on its amino-terminal cadherin repeat. The cytoplasmic tail of Desmoglein-1 interacts with desmoplakins, plakoglobin and plakophilins. In turn, these proteins link the Desmoglein-1 with the intermediate filaments. Desmoglein-1 has been shown to be important in establishing cell-cell adhesion and function in the epidermis. In the autoimmune skin disease pemphigus foliaceus, autoantibodies to Desmoglein-1 can cause the loss of keratinocyte adhesion resulting in blisters.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.