

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Corneodesmosin in direct ELISAs and Western blots.                                                                                                                                                                                                            |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Corneodesmosin<br>Lys33-Pro529 (Ser153 del)<br>Accession # NP_001255                                                                                                                                                  |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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

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

#### BACKGROUND

Corneodesmosin, also known as CDSN and the S gene product, is a highly polymorphic secreted glycoprotein that plays an important structural role in the skin (1). It is expressed by differentiated keratinocytes in the corneal layer of the skin and is a major component of corneodesmosomes (2-4). It is also expressed in the inner root sheath of hair follicles (5, 6). Corneodesmosome has a high content of glycine, serine, and proline residues that promote its folding into a series of Gly-loop domains (2, 7). Corneodesmosin forms oligomers and associates homophilically to strengthen the adhesion between corneocytes (8, 9). Corneodesmosin-deficient mice exhibit a detachment of the corneal layer of the skin as well as hypotrichosis of the scalp and baldness (6, 10). Corneodesmosin is secreted by keratinocytes as a 52-56 kDa molecule which is then subjected to repeated sequential N- and C-terminal proteolysis (11). Species of 46, 43, 36, and 15 kDa are present in corneocytes (7, 11). Cleavage of the N-terminal Gly-loop diminishes Corneodesmosin's ability to mediate adhesion, and this is a prerequisite for normal desquamation of the skin (8, 9). Reduced proteolysis of Corneodesmosin in psoriasis lesions is associated with the persistence of corneodesmosomes and scale retention (12). Premature truncation of Corneodesmosin is associated with hypotrichosis of the scalp (13).

#### 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.