

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Corneodesmosin in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Corneodesmosin Lys33-Pro529 (Ser153 del) Accession # NP_001255
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

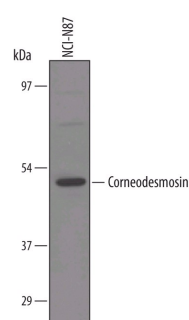
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

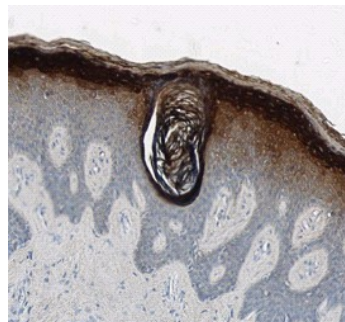
DATA

Western Blot



Detection of Human Corneodesmosin by Western Blot. Western blot shows lysates of NCI-N87 human gastric carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Corneodesmosin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5725) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Corneodesmosin at approximately 52 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 8](#).

Immunohistochemistry



Corneodesmosin in Human Skin. Corneodesmosin was detected in immersion fixed paraffin-embedded sections of human skin using Sheep Anti-Human Corneodesmosin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5725) at 1.7 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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).

References:

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