

DESCRIPTION

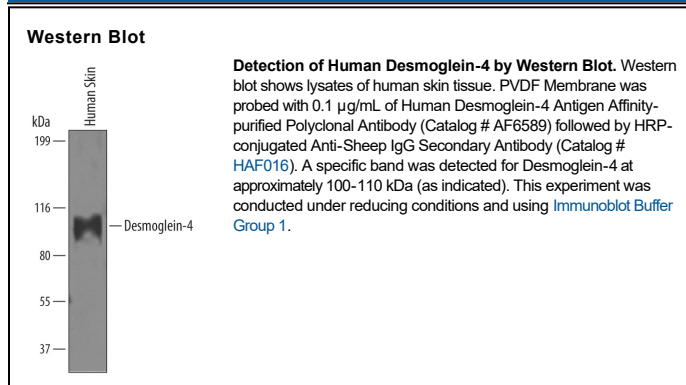
| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human Desmoglein-4 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) Desmoglein-1, rhDesmoglein-2, and rhDesmoglein-3 is observed. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human Desmoglein-4 Glu24-Ala631 Accession # Q86SJ6 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

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 | 0.1 µg/mL | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.2 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

Desmoglein-4 (DSG4) is ~ 110 kDa type I transmembrane glycoprotein in the cadherin family of calcium-dependent cell adhesion molecules. Desmogleins interact with transmembrane Desmocollins to form the adhesive components of desmosomes on epithelial cells. Desmoglein-4 contains four cadherin repeats in its extracellular region and two desmoglein repeat domains in its cytoplasmic region. Alternate splicing generates an additional isoform with a substitution in the cytoplasmic region. Desmoglein-4 is expressed on keratinocytes and trichocytes in the epidermis and hair follicles. It is required for hair follicle development, and DSG4 mutations are associated with autosomal recessive hypotrichosis. Within amino acids 24-631 (which includes the 26 aa propeptide and the ECD), human Desmoglein-4 shares 82% aa sequence identity with mouse and rat Desmoglein-4.