

DESCRIPTION

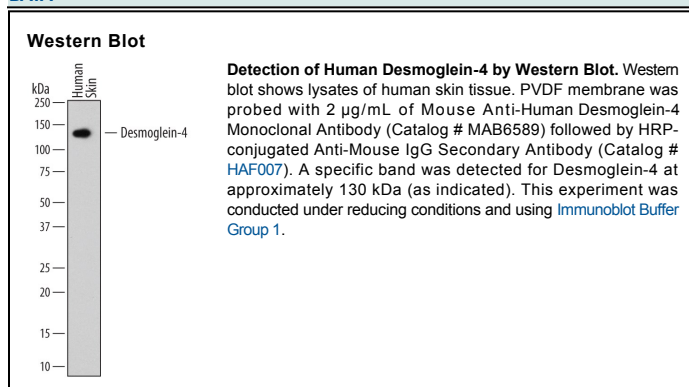
Species Reactivity	Human
Specificity	Detects human Desmoglein-4 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human Desmoglein-1, -2, or -3 is observed and approximately 40% cross-reactivity with recombinant mouse Desmoglein-4 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 683135
Purification	Protein A or G purified from hybridoma culture supernatant
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 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	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 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 a 110-130 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.