

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Desmocollin-3 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 20% cross-reactivity with recombinant human Desmocollin-3 is observed and no cross-reactivity with recombinant mouse (rm) Desmocollin-1 or rmDesmocollin-2 is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 765129
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Desmocollin-3 Arg136-Leu695 Accession # P55850
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.

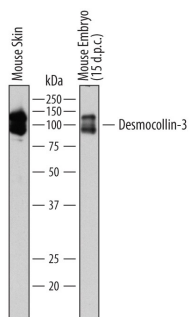
APPLICATIONS

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	1 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

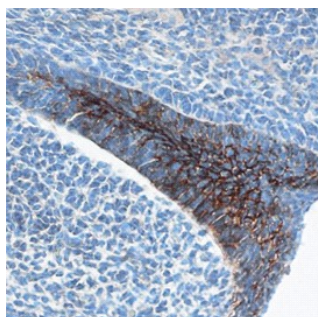
DATA

Western Blot



Detection of Mouse Desmocollin-3 by Western Blot.
Western blot shows lysates of mouse skin tissue and mouse embryo (15 d.p.c.) tissue. PVDF membrane was probed with 1 µg/mL of Rat Anti-Mouse Desmocollin-3 Monoclonal Antibody (Catalog # MAB7265) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). Specific bands were detected for Desmocollin-3 at approximately 95-110 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunohistochemistry



Desmocollin-3 in Mouse Embryo.
Desmocollin-3 was detected in perfusion fixed frozen sections of mouse embryo (15 d.p.c.) using Rat Anti-Mouse Desmocollin-3 Monoclonal Antibody (Catalog # MAB7265) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS017) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane and cytoplasm in epidermis. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

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

DSC-3 (Desmocollin [Greek for "glue-that-binds"]-3) is a 95-110 kDa member of the Ca⁺⁺-dependent cadherin family of adhesion molecules. It is found on the surface of stratified epithelial cells, including keratinized and nonkeratinized epithelia of the urinary bladder, vagina, oral cavity and skin. DSC-3 serves as a component of desmosomes, forming a linkage that unites adjacent cells with cytoplasmic intermediate filaments. In particular, in the extracellular space, DSC-3 forms both homotypic and heterotypic interactions with DSG-1 in-trans, and binds to the cytoskeleton intracellularly via plakophilin-3. Mature mouse DSC-3 is a 760 amino acid (aa) type I transmembrane glycoprotein. The mature molecule contains a 560 aa extracellular region with five cadherin domains (aa 136-691), and a 179 aa cytoplasmic domain that possesses three utilized Ser phosphorylation sites. There is one splice variant that shows an eight aa substitution for aa 831-895. Over aa 136-695, mouse DSC-3 shares 79% and 93% aa identity with human and rat DSC-3, respectively.