

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Desmocollin-2 in direct ELISAs. In direct ELISAs, approximately 10% cross-reactivity with recombinant human Desmocollin-2 is observed, and less than 1% cross-reactivity with recombinant mouse (rm) Desmocollin-1 and rmDesmocollin-3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Desmocollin-2 Arg136-Pro694 Accession # P55292
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.

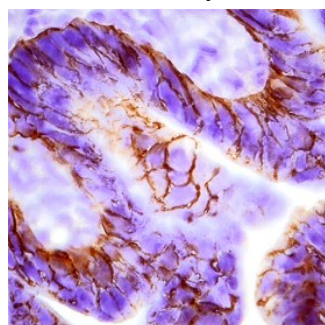
APPLICATIONS

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
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry



Desmocollin-2 in Mouse Embryo.

Desmocollin-2 was detected in perfusion fixed frozen sections of mouse embryo (15 d.p.c.) using Sheep Anti-Mouse Desmocollin-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7490) at 5 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). Specific staining was localized to the plasma membranes of epithelial cells. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

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

DSC-2 (Desmocollin [Greek for "glue-that-binds"]-2; also epithelial type 2 desmocollin) is a 100-120 kDa member of the Ca⁺⁺-dependent cadherin family of adhesion molecules. It is found on the surface of both simple and stratified epithelium that form desmosomes. DSC-2 expression is induced by DSG-2 where it serves as a component of desmosomes, forming a linkage that unites adjacent cells with cytoplasmic intermediate filaments. Homodimeric DSC-2 forms in-trans, and DSC-2 may also form heterotypic interactions with DSG-2. A DSC-2:DSG-2 cis-interaction is suggested to block DSG-2 activation of Akt, an action that results in β-catenin mediated cell proliferation. Mature mouse DSC-2 is a 767 amino acid (aa) type I transmembrane glycoprotein (aa 136-902). The mature molecule contains a 559 aa extracellular region (aa 136-694) with five cadherin domains (aa 136-694) and a 187 aa cytoplasmic tail (aa 716-902). There is one 100-110 kDa splice variant that shows an 11 aa substitution for aa 838-902. Over aa 136-694, mouse DSC-2 shares 87% and 79% aa sequence identity with rat and human DSC-2, respectively.