

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Desmocollin-3 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) Desmocollin-2 is observed and less than 1% cross-reactivity with rhDesmocollin-1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Desmocollin-3 Arg136-Lys690 Accession # Q14574
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Desmocollin-3 is a 100-110 kDa type I transmembrane glycoprotein that belongs to the cadherin family of calcium dependent adhesion molecules (1-3). The human Desmocollin-3 is synthesized with a 108 amino acid (aa) propeptide. The mature protein consists of a 555 aa extracellular domain (ECD) that contains five cadherin-like domains, a 21 aa transmembrane segment, and a 185 aa cytoplasmic domain (4, 5). Within the ECD, human Desmocollin-3 shares 78% aa sequence identity with mouse and rat Desmocollin-3. It shares 52% and 64% aa sequence identity with Desmocollin-1 and -2, respectively. A splice variant of human Desmocollin-3 has a truncated and substituted cytoplasmic domain (4, 6). Desmocollin-3 is one of the principal components of desmosomes which form adhesive contacts between epithelial cells (1, 2). It is expressed in the basal and suprabasal layers of stratified epithelia in many tissues (5, 7, 8). Desmocollin-1 and -2, by contrast, are preferentially localized in the more superficial layers (7). In mouse, Desmocollin-3 is expressed throughout embryogenesis and is required for non-desmosomal functions during early development (9, 10). During apoptosis, both isoforms of Desmocollin-3 are proteolytically cleaved by caspases and metalloproteases (11). Desmocollin-3 can be up-regulated or down-regulated in carcinoma (6, 12, 13).

PRODUCT SPECIFIC NOTICES

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