

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects recombinant human Laminin $\alpha$ 3 protein in Direct ELISA.
<b>Source</b>	Monoclonal Mouse IgG Clone # P3H9-2R
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human keratinocytes Accession # Q16787
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose.

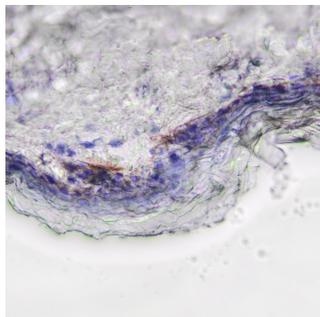
## APPLICATIONS

**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
<b>Immunocytochemistry</b>	3-25 $\mu$ g/mL	Immersion fixed A431 human epithelial carcinoma cell line
<b>Immunohistochemistry</b>	1-25 $\mu$ g/mL	Perfusion frozen fixed sections of human Skin.

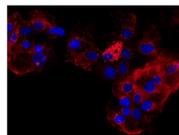
## DATA

### Immunohistochemistry

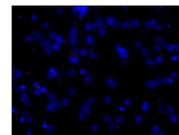


**Detection of Laminin5 in frozen human skin.** Laminin  $\alpha$ 3/Laminin-5 was detected in perfusion fixed frozen sections of human skin using Mouse Anti-Human Laminin  $\alpha$ 3/Laminin-5 Monoclonal Antibody (Catalog # MAB11784) at 1.5  $\mu$ g/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # Catalog # VCTS021). Tissue was stained using the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # Catalog # HAF007) and counterstained with hematoxylin (blue). Specific staining was localized to the basement membrane in frozen human Skin. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

### Immunocytochemistry



Positive (A431 cells)



Negative (Daudi cells)

**Detection of Laminin  $\alpha$ 3/Laminin-5 in A431 cells.** Laminin  $\alpha$ 3/Laminin-5 was detected in immersion fixed A431 human epithelial carcinoma cell line (Positive) and absent in Daudi human Burkitt's lymphoma cell line (Negative) using Mouse Anti-Human Laminin  $\alpha$ 3/Laminin-5 Monoclonal Antibody (Catalog # MAB11784) at 3  $\mu$ g/ml for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to the cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
<b>Shipping</b>	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Laminins are heterotrimeric, noncollagenous glycoproteins composed of  $\alpha$ ,  $\beta$ , and  $\gamma$  chains. Through interactions with integrins, dystroglycan and other receptors, laminins contribute to cell differentiation, cell shape and migration, and maintenance of tissue phenotypes and survival. Laminin  $\alpha$ 3/Laminin-5, also known as epiligrin, includes  $\alpha$ 3,  $\beta$ 3, and  $\gamma$ 2 subunits. It is abundant in transitional epithelium, stratified squamous epithelia, lung mucosa and other epithelial glands and contributes to initiation and maintenance of epithelial cell anchorage to the underlying connective tissue. Within aa 21-1713 of the  $\alpha$ 3 subunit, human and mouse share 77% amino acid sequence identity.