

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Claudin-4 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 382316
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human Claudin-4 Met1-Val209 Accession # NP_001296
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.

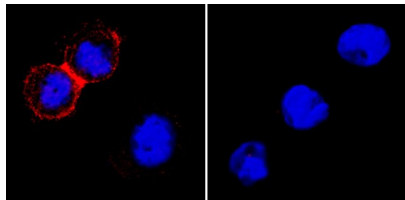
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



PC-3 **HL-60**

Claudin-4 in PC-3 Human Cell Line. Claudin-4 was detected in immersion fixed PC-3 human prostate cancer cell line (positive staining) and HLDM-2 human Hodgkin's lymphoma cell line (negative staining) using Mouse Anti-Human Claudin-4 Monoclonal Antibody (Catalog # MAB42191) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cell surface and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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

Claudin-4 is a multipass membrane protein in the claudin family of tight junction proteins. Claudin-4 is a 209 amino acid molecule with four transmembrane segments. It is preferentially expressed in intestinal mucosa epithelium and is involved in epithelial tissue development. It is also up-regulated in several carcinomas. Phosphorylation of Claudin-4 regulates paracellular epithelial permeability. Human Claudin-4 shares 83% aa sequence identity with mouse and rat Claudin-4.