

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Claudin-8. Stains human Claudin-8 transfectants but not irrelevant transfectants.
Source	Monoclonal Mouse IgG ₁ Clone # 474210
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	HEK293 human embryonic kidney cell line transfected with human Claudin-8 Met1-Val225 (Ser151Pro) Accession # P56748
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
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Intracellular Staining by Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Flow Cytometry</p> <p>Detection of Claudin-8 in HEK293 Human Cell Line Transfected with Human Claudin-8 by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with human Claudin-8 was stained with Mouse Anti-Human Claudin-8 Monoclonal Antibody (Catalog # MAB5275, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). View our protocol for Staining Membrane-associated Proteins.</p>	<p>Intracellular Staining by Flow Cytometry</p> <p>Detection of Claudin-8 in Caki-2 Human Cell Line by Flow Cytometry. Caki-2 human clear cell carcinoma epithelial cell line was stained with Mouse Anti-Human Claudin-8 Monoclonal Antibody (Catalog # MAB5275, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for Staining Intracellular Molecules.</p>
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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-8 is a 225 amino acid (aa), 25 kDa four-transmembrane protein in the Claudin family of tight junction proteins. It is selectively expressed in tight junctions in the kidney thin descending limb, distal tubule and collecting duct, but is also found in liver and intestinal tight junctions. It is thought to function as an ion barrier protein. The extracellular portions of human Claudin-8 share 86% and 89% aa identity with corresponding portions of mouse and rat Claudin-8, respectively.