

## DESCRIPTION

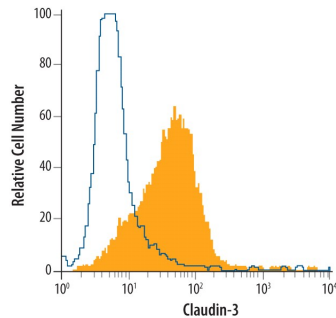
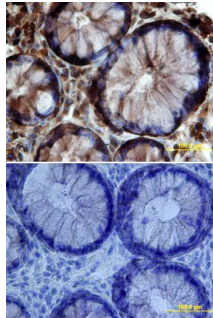
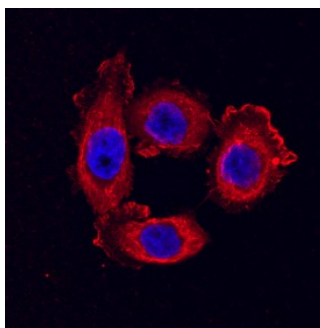
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Stains human Claudin-3 transfectants but not irrelevant transfectants.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 385021
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	HEK293 human embryonic kidney cell line transfected with human Claudin-3 Met1-Val220 Accession # O15551
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS and NaCl 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

## DATA

<p><b>Flow Cytometry</b></p>  <p><b>Detection of Claudin-3 in PC-3 Human Cell Line by Flow Cytometry.</b> PC-3 human prostate cancer cell line was stained with Mouse Anti-Human Claudin-3 Monoclonal Antibody (Catalog # MAB4620, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG F(ab')<sub>2</sub> Secondary Antibody (Catalog # F0102B).</p>	<p><b>Immunohistochemistry</b></p>  <p><b>Claudin-3 in Human Colon.</b> Claudin-3 was detected in immersion fixed paraffin-embedded sections of human colon array using Mouse Anti-Human Claudin-3 Monoclonal Antibody (Catalog # MAB4620) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
<p><b>Immunocytochemistry</b></p>  <p><b>Claudin-3 in PC-3 Human Cell Line.</b> Claudin-3 was detected in immersion fixed PC-3 human prostate cancer cell line using Mouse Anti-Human Claudin-3 Monoclonal Antibody (Catalog # MAB4620) at 10 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 cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>	

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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

Claudin-3 is a 23 kDa multipass membrane protein in the claudin family of epithelial tight junction proteins. Claudin-3 is upregulated by EGF and in inflammation and a variety of epithelial cancers. Its expression is lost in the blood brain barrier during pathological disruptions of that structure. Claudin-3 binding to the *Clostridium perfringens* exotoxin induces epithelial cell lysis. Human Claudin-3 shares 91% amino acid sequence identity with mouse and rat Claudin-3.