## ALLINA HEALTH LABORATORY

## New test

Test name: Claudin-4 by IHC

Test #: 12376 - Technical only; 12379 - Technical & interpretation

Notification date: August 21, 2020

**Effective date:** Immediately

The Allina Health Immunohistochemistry (IHC) laboratory is pleased to share that the <u>Claudin-4</u> by IHC is now being offered. Our IHC request form has been updated to include this new stain.

Claudin-4 should be used as part of a panel of immunohistochemical stains to evaluate neoplasms of epithelial differentiation from benign mesothelial cells and mesothelial neoplasms. Claudin-4 has a reported sensitivity ranging from 91-100% and a specificity of 94-100% for epithelial neoplasms. Rare mesothelial lesions and benign mesothelial cells have been reported to show focal granular cytoplasmic (not membranous) positivity.

## **Specifications**

Claudin-4 is one of 27 proteins that comprise functional constituents of epithelial tight junctions, which are expressed in the majority of epithelial cells. These proteins are present at epithelial and endothelial cell interfaces are responsible for ion flux, recruitment of signaling protein and regulating cell proliferation and differentiation. Claudin-4 is generally overexpressed in epithelial neoplasms.

## Staining patterns

Membranous staining Cytoplasmic staining is considered non-specific



