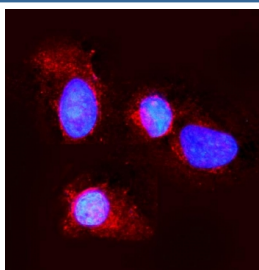


## Claudin 3 Antibody / CLDN3 (RQ5714)

| Catalog No. | Formulation                                           | Size   |
|-------------|-------------------------------------------------------|--------|
| RQ5714      | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

**Bulk quote request**

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| <b>Availability</b>       | 1-3 business days                                                 |
| <b>Species Reactivity</b> | Mouse, Rat                                                        |
| <b>Format</b>             | Antigen affinity purified                                         |
| <b>Clonality</b>          | Polyclonal                                                        |
| <b>Isotype</b>            | Rabbit IgG                                                        |
| <b>Purity</b>             | Affinity purified                                                 |
| <b>Buffer</b>             | Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide |
| <b>UniProt</b>            | Q9Z0G9                                                            |
| <b>Applications</b>       | Western Blot : 0.5-1ug/ml<br>Immunofluorescence : 2-4ug/ml        |
| <b>Limitations</b>        | This Claudin 3 antibody is available for research use only.       |



Immunofluorescent staining of FFPE mouse NIH 3T3 cells with Claudin 3 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of rat PC-12 lysate with Claudin 3 antibody. Predicted molecular weight ~23 kDa.

## Description

Claudin 3, also known as CLDN3, is a protein which in humans is encoded by the CLDN3 gene. This gene encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. The protein encoded by this gene is a low-affinity receptor for clostridium perfringens enterotoxin (CPE) produced by the bacterium *Clostridium perfringens*, and the interaction with CPE results in increased membrane permeability by forming small pores in plasma membrane. This protein is highly overexpressed in uterine carcinosarcoma. This protein is also predominantly present in brain endothelial cells, where it plays a specific role in the establishment and maintenance of blood brain barrier tight junction morphology.

## Application Notes

Optimal dilution of the Claudin 3 antibody should be determined by the researcher.

## Immunogen

Amino acids RDKYAPTKILYSAPRST from the mouse protein were used as the immunogen for the Claudin 3 antibody.

## Storage

After reconstitution, the Claudin 3 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.