claudin-2 (3F1): sc-293233

**BACKGROUND**

The claudin superfamily consists of structurally related proteins that are important structural and functional components of tight junctions. Claudin-2, also known as CLDN2 or SP82, is a 230 amino acid multi-pass membrane protein that localizes to the cell junctions and belongs to the claudin superfamily. Able to form homopolymers of heteropolymers with other claudin family members, claudin-2 plays an essential role in mediating calcium-independent cell-adhesion activity that is necessary for tight junction-specific obliteration of the intercellular space. Overexpression of claudin-2 is associated with a variety of diseases, including lung cancer, colorectal cancer, gastrointestinal carcinomas and inflammatory bowel disease, further affirming the importance of claudin-2 in cell adhesion. The gene encoding claudin-2 maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: CLDN2 (human) mapping to Xq22.3; Cldn2 (mouse) mapping to X F1.

**SOURCE**

claudin-2 (3F1) is a mouse monoclonal antibody raised against amino acids 29-80 of claudin-2 of human origin.

**PRODUCT**

Each vial contains 100 µg IgG kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**


**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

![Graph showing claudin-2 fusion protein](Image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.