

## Product Information

### MemDX™ Membrane Protein Mouse Cldn19 (Claudin 19) Expressed *in vitro* *E.coli* expression system, Full Length

Cat. No.: **MPX2233K**

This product is for research use only and is not intended for diagnostic use.

This product is a Mouse Cldn19 membrane protein expressed *in vitro* *E.coli* expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

#### Product Specifications

##### Host Species

Mouse

##### Target Protein

Clnd19

##### Protein Length

Full Length

##### Protein Class

Receptor

##### TMD

4

##### Sequence

MANSGLQLLGYFLALGGWVGIIASTALPQWKQSSYAGDAIITAVGLYEGLWMSCASQSTGQVQCKLYDSLLALDGHIQSARALMVV

#### Product Description

##### Expression Systems

*in vitro* *E.coli* expression system

##### Tag

10xHis tag at the N-terminus

##### Protein Format

Soluble

##### Form

Liquid or Lyophilized powder

##### Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

### **Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

## **Target**

### **Target Protein**

Cldn19

### **Full Name**

Claudin 19

### **Introduction**

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. siRNA knockdown of this gene in mice develops the FHHNC (familial hypomagnesemia with hypercalciuria and nephrocalcinosis) symptoms of chronic renal wasting of magnesium and calcium together with defective renal salt handling. The protein encoded by this gene interacts with another family member, Claudin 16, and their interaction is required for their assembly into tight junctions and for renal reabsorption of magnesium. This protein is a constituent of tight junctions in the Schwann cells of peripheral myelinated nerves and the gene deficiency affects the nerve conduction of peripheral myelinated fibers. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

### **Alternative Names**

Cldn19; claudin-19; Claudin 19

### **Gene ID**

[242653](#)

### **UniProt ID**

[Q9ET38](#)