

# Product Information

## MemDX™ Human CLDN18.2 MKN45 Cell Line

Cat. No.: **S01YF-0123-KX103**

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

### Product Information

#### Target Protein

CLDN18.2

#### Target Protein Species

Human

#### Accession Number

NM\_001002026.2

#### Protein Tag

Tag-free

#### Host Cell Type

MKN45

#### Target Classification

Others

#### Target Family

Others

#### Target Research Area

Cancer Research

#### Related Diseases

Gastroesophageal Adenocarcinoma; Gastroesophageal Junction Adenocarcinoma

### Product Properties

#### Assay Types

Drug screening and biological assays

#### Resistance

Puromycin

#### Mycoplasma Testing

Negative

#### Sterility Testing

10 passages

### **Biosafety Level**

Level 1

### **Activity**

Yes

### **Quantity**

5x10<sup>6</sup> cells

### **Form**

Frozen cells

### **Freeze Medium**

70% RPMI 1640 + 20% FBS + 10% DMSO

### **Culture Medium**

RPMI 1640 + 10% FBS + 1µg/mL Puromycin

### **Selective Antibiotic(s)**

Regular antibiotics active against mycoplasmas, bacteria and fungi.

### **Handling Notes**

Frozen cells should be thawed immediately upon receipt and grown according to handling procedure to ensure cell viability and proper assay performance.

Note: Do not freeze the cells upon receipt as it may result in irreversible damage to the cell line.

Disclaimer: We cannot guarantee cell viability if the cells are not thawed immediately upon receipt and grown according to handling procedure.

### **Incubation**

37°C with 5% CO<sub>2</sub>

### **Applications**

Drug screening and biological assays

### **Application Notes**

Cells were plated in a 384-well plate and incubated overnight at 37°C and 5% CO<sub>2</sub> to allow the cells to attach and grow. Cells were then stimulated with a control for high-throughput drugs screening and functional assays.

### **Use Restrictions**

These cells are distributed for research use only.

### **Shipping**

Dry ice

### **Storage**

Liquid nitrogen

### **Target**

### **Full Name**

Claudin 18

### **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. This gene is upregulated in patients with ulcerative colitis and highly overexpressed in infiltrating ductal adenocarcinomas. PKC/MAPK/AP-1 (protein kinase C/mitogen-activated protein kinase/activator protein-1) dependent pathway regulates the expression of this gene in gastric cells. Alternatively spliced transcript variants encoding different isoforms have been identified.

**Alternative Names**

CLDN18; SFTA5; SFTPJ; claudin-18; surfactant associated 5; surfactant associated protein J; surfactant, pulmonary associated protein J; Claudin 18

**Gene ID**

[51208](#)

**UniProt ID**

[P56856](#)