

# Product Information

## MemDX™ mPro Human HCRTR1 Cell Line

Cat. No.: **S01YF-1122-KX44**

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

### Product Information

#### Target Protein

HCRTR1

#### Target Protein Species

Human

#### Target Classification

GPCR

#### Target Family

Orexin Receptors

#### Target Research Area

CNS Research

#### Related Diseases

Narcolepsy; Rohhad

### Product Properties

#### Mycoplasma Testing

Negative

#### Biosafety Level

Level 1

#### Activity

Yes

#### Form

Frozen cells

#### 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**

Hypocretin receptor 1

### **Introduction**

The protein encoded by this gene is a G-protein coupled receptor involved in the regulation of feeding behavior. The encoded protein selectively binds the hypothalamic neuropeptide orexin A. A related gene (HCRTR2) encodes a G-protein coupled receptor that binds orexin A and orexin B.

### **GPCR Signaling Pathway**

The endogenous ligand is orexin. Targeted protein activation can cause binding of Gq to G11 protein which, in turn, activate a phosphatidylinositol-calcium second messenger system.

### **G coupling**

Gq

### **Endogenous Ligand**

Orexin

### **Alternative Names**

OX1R; orexin receptor type 1; hypocretin (orexin) receptor 1; hypocretin receptor type 1; orexin receptor 1; HCRTR1; Hypocretin receptor 1

### **Gene ID**

[3061](#)

### **UniProt ID**

[O43613](#)