

Product Information

MemDX™ mPro Human HCRTR2 Cell Line

Cat. No.: **S01YF-1122-KX45**

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

Product Information

Target Protein

HCRTR2

Target Protein Species

Human

Target Classification

GPCR

Target Family

Orexin Receptors

Target Research Area

CNS Research

Related Diseases

Headache; Sleep Disorder

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% CO₂

Applications

Drug screening and biological assays

Application Notes

Cells were plated in a 384-well plate and incubated overnight at 37°C and 5% CO₂ 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 2

Introduction

The protein encoded by this gene is a G-protein coupled receptor involved in the regulation of feeding behavior. The encoded protein binds the hypothalamic neuropeptides orexin A and orexin B. A related gene (HCRTR1) encodes a G-protein coupled receptor that selectively binds orexin A.

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

OX2R; orexin receptor type 2; hypocretin (orexin) receptor 2; hypocretin receptor type 2; orexin type-2 receptor; HCRTR2; Hypocretin receptor 2

Gene ID

[3062](#)

UniProt ID

[O43614](#)