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Product Information

MemDX™ Human FLAG tagged GLP1R HEK293T Cell Line, Calcium flux assay

Cat. No.: **S01YF-1022-KX359**
This product is for research use only and is not intended for diagnostic use.

Product Information

Target Protein
GLP1R

Target Protein Species
Human

Accession Number
NM_002062

Protein Tag
FLAG-tag at N-terminus

Host Cell Type
HEK293T

Target Classification
GPCR

Target Family
Glucagon

Target Research Area
Cancer Research; Diabetes Research; Digestive and Renal Research

Related Diseases
Insulinoma; Hyperglycemia

Product Properties

Assay Types
Calcium flux assay

Resistance
Puromycin

Stability
Stable for a minimum of 2 months in continuous culture

Mycoplasma Testing

Negative

Biosafety Level

Level 1

Activity

Yes

Quantity

$2x10^6$ cells

Form

Frozen cells

Culture Medium

DMEM, 10% FBS, 1 μg/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_2

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_2 to allow the cells to attach and grow. Cells were then stimulated with a control for high-throughput drugs screening andfunctional assays.

Use Restrictions

These cells are distributed for research use only.

Shipping

Dry ice

Storage

Liquid nitrogen

Target

Full Name

Glucagon like peptide 1 receptor

Introduction

This gene encodes a 7-transmembrane protein that functions as a receptor for glucagon-like peptide 1 (GLP-1) hormone, which stimulates glucose-induced insulin secretion. This receptor, which functions at the cell surface, becomes

internalized in response to GLP-1 and GLP-1 analogs, and it plays an important role in the signaling cascades leading to insulin secretion. It also displays neuroprotective effects in animal models. Polymorphisms in this gene are associated with diabetes. The protein is an important drug target for the treatment of type 2 diabetes and stroke. Alternative splicing of this gene results in multiple transcript variants.

GPCR Signaling Pathway

The endogenous ligand is glucagon-like peptide 1. Targeted protein activation can cause binding of Gs to Go protein which, in turn, cause an inhibition of adenylate cyclase and then decrease of cAMP concentration.

G coupling

Gs

Endogenous Ligand

Glucagon-like peptide 1

Alternative Names

GLP-1; GLP-1R; GLP-1-R;glucagon-like peptide 1 receptor;GLP-1 receptor;GLP1 receptor;seven transmembrane helix receptor;GLP1R

Gene ID

2740

UniProt ID

P43220