

Product Information

MemDX™ Rat FLAG tagged P2RY12 CHO dhfr- Cell Line, Calcium flux assay

Cat. No.: **S01YF-1022-KX579**

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

Product Information

Target Protein

P2RY12

Target Protein Species

Rat

Accession Number

N<_022800</td>

Host Cell Type

CHO dhfr-

Target Classification

GPCR

Target Family

Purinergic

Target Research Area

Cardiovascular Research

Related Diseases

Bleeding Disorder; Nizon-Isidor Syndrome

Product Properties

Assay Types

Calcium flux assay

Resistance

Hygromycin

Stability

Stable for a minimum of 2 months in continuous culture

Mycoplasma Testing

Negative

Biosafety Level

Level 1

Activity

Yes

Quantity

2x10⁶ cells

Form

Frozen cells

Culture Medium

α-MEM, 10% FBS, 100 µg/ml hygromycin

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

Purinergic receptor P2Y₁₂

Introduction

Enables G protein-coupled ADP receptor activity. Involved in several processes, including G protein-coupled receptor signaling pathway; inorganic cation transmembrane transport; and intracellular signal transduction. Located in basal plasma membrane; caveola; and external side of plasma membrane. Colocalizes with mitochondrion. Used to study abdominal aortic aneurysm and thrombosis. Human ortholog(s) of this gene implicated in asthma; cerebrovascular disease; peripheral artery disease; platelet-type bleeding disorder 8; and type 2 diabetes mellitus. Orthologous to human P2RY12 (purinergic receptor P2Y₁₂).

GPCR Signaling Pathway

The endogenous ligand is Purinergic. Targeted protein activation can cause binding of Gi to Go protein which, in turn, cause an inhibition of adenylate cyclase and then decrease of cAMP concentration.

G coupling

Gi & Go

Endogenous Ligand

Purinergic

Alternative Names

P2y12;P2Y purinoceptor 12;P2Y12 platelet ADP receptor;purinergic receptor P2Y, G-protein coupled, 12;P2ry12

Gene ID

[64803](#)

UniProt ID

[Q9EPX4](#)