

# Product Information

## MemDX™ mPro Human P2RY12 Cell Line

Cat. No.: **S01YF-1122-KX48**

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

### Product Information

#### Target Protein

P2RY12

#### Target Protein Species

Human

#### Target Classification

GPCR

#### Target Family

P2Y Receptors

#### Target Research Area

Cardiovascular Research

#### Related Diseases

Bleeding Disorder; Nizon-Isidor Syndrome

### 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

Purinergic receptor P2Y12

### Introduction

The product of this gene belongs to the family of G-protein coupled receptors. This family has several receptor subtypes with different pharmacological selectivity, which overlaps in some cases, for various adenosine and uridine nucleotides. This receptor is involved in platelet aggregation, and is a potential target for the treatment of thromboembolisms and other clotting disorders. Mutations in this gene are implicated in bleeding disorder, platelet type 8 (BDPLT8). Alternative splicing results in multiple transcript variants of this gene.

### 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

HORK3; P2Y12; ADPG-R; BDPLT8; SP1999; P2T(AC); P2Y(AC); P2Y(12)R; P2Y(ADP); P2Y(cyc); P2Y purinoceptor 12; ADP-glucose receptor; G-protein coupled receptor SP1999; Gi-coupled ADP receptor HORK3; P2Y12 platelet ADP receptor; purinergic receptor P2RY12; purinergic receptor P2Y, G-protein coupled, 12; putative G-protein coupled receptor; P2RY12; Purinergic receptor P2Y12

### Gene ID

[64805](#)

### UniProt ID

[Q9H244](#)