

# **Product Information**

## MemDX™ Human FLAG tagged P2RY12 1321N1 Cell Line, Calcium flux assay

Cat. No.: S01YF-1022-KX578

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

#### **Product Information**

**Target Protein** 

P2RY12

**Target Protein Species** 

Human

**Accession Number** 

NM\_022788

**Host Cell Type** 

1321N1

**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

Puromycin

**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**

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<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% CO₂ 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**

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

Gene ID

64805

**UniProt ID** 

Q9H244