

Product Information

MemDX™ Human FLAG tagged HTR1A HEK293T Cell Line, Calcium flux assay

Cat. No.: **S01YF-1022-KX587**

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

Product Information

Target Protein

HTR1A

Target Protein Species

Human

Accession Number

NM_000524.2

Protein Tag

FLAG-tag at N-terminus

Host Cell Type

HEK293T

Target Classification

GPCR

Target Family

Serotonin

Target Research Area

CNS Research

Related Diseases

Periodic Fever; Menstrual Cycle-Dependent; Generalized Anxiety Disorder

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% 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**

5-hydroxytryptamine receptor 1A

Introduction

This gene encodes a G protein-coupled receptor for 5-hydroxytryptamine (serotonin), and belongs to the 5-hydroxytryptamine receptor subfamily. Serotonin has been implicated in a number of physiologic processes and pathologic conditions. Inactivation of this gene in mice results in behavior consistent with an increased anxiety and stress

response. Mutation in the promoter of this gene has been associated with menstrual cycle-dependent periodic fevers.

GPCR Signaling Pathway

The endogenous ligand is serotonin. 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

Serotonin

Alternative Names

G-21; 5HT1a; PFMCD; 5-HT1A; 5-HT-1A; ADRBRL1; ADRB2RL1; 5-hydroxytryptamine receptor 1A; 5-HT1a receptor; 5-hydroxytryptamine (serotonin) receptor 1A, G protein-coupled; guanine nucleotide-binding regulatory protein-coupled receptor; Serotonin receptor 1A; HTR1A

Gene ID

[3350](#)

UniProt ID

[P08908](#)