

# **Product Information**

# MemDX™ Human CD40 HT1080 Cell Line

Cat. No.: S01YF-0123-KX350

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

#### **Product Information**

**Target Protein** 

**CD40** 

**Target Protein Species** 

Human

**Accession Number** 

NM\_001250.5

**Protein Tag** 

Tag-free

**Host Cell Type** 

HT1080

**Target Classification** 

CD

**Target Family** 

CD

**Target Research Area** 

Autoimmune Research; Immunology Research

**Related Diseases** 

Immunodeficiency With Hyper-Igm

# **Product Properties**

# Morphology

**Epithelial** 

**Assay Types** 

Drug screening and biological assays

Resistance

Puromycin

**Mycoplasma Testing** 

#### Negative

# **Sterility Testing**

10 passages

## **Biosafety Level**

Level 1

#### **Activity**

Yes

# Quantity

5x106 cells

#### **Form**

Frozen cells

## Freeze Medium

70% RPMI 1640 + 20% FBS + 10% DMSO

## **Culture Medium**

RPMI 1640 + 10% FBS + 0.5µg/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% CO<sub>2</sub> 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**

#### CD40 molecule

## Introduction

This gene is a member of the TNF-receptor superfamily. The encoded protein is a receptor on antigen-presenting cells of the immune system and is essential for mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and germinal center formation. AT-hook transcription factor AKNA is reported to coordinately regulate the expression of this receptor and its ligand, which may be important for homotypic cell interactions. Adaptor protein TNFR2 interacts with this receptor and serves as a mediator of the signal transduction. The interaction of this receptor and its ligand is found to be necessary for amyloid-beta-induced microglial activation, and thus is thought to be an early event in Alzheimer disease pathogenesis. Mutations affecting this gene are the cause of autosomal recessive hyper-IgM immunodeficiency type 3 (HIGM3). Multiple alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

## **Alternative Names**

CD40; p50; Bp50; CDW40; TNFRSF5; tumor necrosis factor receptor superfamily member 5; B cell surface antigen CD40; B cell-associated molecule; CD40 molecule, TNF receptor superfamily member 5; CD40L receptor; CD40 molecule

Gene ID

<u>958</u>

**UniProt ID** 

P25942