

# **Product Information**

# MemDX™ Knockout TNF THP-1 Cell Line

Cat. No.: S01YF-1222-KX907

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

#### **Product Information**

**Target Protein** 

**TNF** 

**Host Cell Type** 

THP-1

**Target Classification** 

**Knockout Cell Lines** 

**Target Research Area** 

Infectious Research

**Related Diseases** 

Malaria; Asthma

# **Product Properties**

# Morphology

Suspension

#### Stability

< 20 passages

# **Mycoplasma Testing**

Negative

# **Biosafety Level**

Level 1

# **Activity**

Yes

# Quantity

1x10<sup>6</sup> cells

#### **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**

WB; ELISA

#### **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**

Tumor necrosis factor

#### Introduction

This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, psoriasis, rheumatoid arthritis ankylosing spondylitis, tuberculosis, autosomal dominant polycystic kidney disease, and cancer. Mutations in this gene affect susceptibility to cerebral malaria, septic shock, and Alzheimer disease. Knockout studies in mice also suggested the neuroprotective function of this cytokine.

# **Alternative Names**

TNF; DIF; TNFA; TNFSF2; TNLG1F; TNF-alpha; tumor necrosis factor; APC1 protein; TNF, macrophage-derived; TNF, monocyte-derived; TNF-a; tumor necrosis factor ligand 1F; tumor necrosis factor ligand superfamily member 2; tumor necrosis factor-alpha; Tumor necrosis factor

#### Gene ID

7124

#### **UniProt ID**

P01375