

Product Information

MemDX™ Knockout IL1B THP-1 Cell Line

Cat. No.: **S01YF-1222-KX906**

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

Product Information

Target Protein

IL1B

Host Cell Type

THP-1

Target Classification

Knockout Cell Lines

Target Research Area

Cancer Research

Related Diseases

Gastric Cancer; Toxic Shock Syndrome

Product Properties

Morphology

Suspension

Stability

< 20 passages

Mycoplasma Testing

Negative

Biosafety Level

Level 1

Activity

Yes

Quantity

1x10⁶ 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% CO₂

Applications

WB; Flow Cyt

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

Interleukin 1 beta

Introduction

The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. Similarly, IL-1B has been implicated in human osteoarthritis pathogenesis. Patients with severe Coronavirus Disease 2019 (COVID-19) present elevated levels of pro-inflammatory cytokines such as IL-1B in bronchial alveolar lavage fluid samples. The lung damage induced by the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL-1B. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2.

Alternative Names

IL-1; IL1F2; IL1beta; IL1-BETA; interleukin-1 beta; IL-1 beta; catabolin; interleukin 1beta; preinterleukin 1 beta; pro-interleukin-1-beta

Gene ID

[3553](#)

UniProt ID

[P01584](#)