

# Product Information

## **MemDX™ Antibody Discovery - Human TNF-alpha (77-233) Membrane Protein, Partial, [Biotin]**

Cat. No.: **MP0495F**

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

This membrane protein is Human TNF-alpha (77-233). It has been tested in SDS-PAGE, ELISA, SEC-MALS. We provide this protein to facilitate your membrane protein antibody discovery and development.

### Product Specifications

#### **Host Species**

Human

#### **Target Protein**

TNF-alpha

#### **Protein Length**

ECD

#### **Molecular Weight**

The protein has a calculated MW of 17.4 kDa. The protein migrates as 18 kDa on a SDS-PAGE gel under reducing (R) condition.

#### **Sequence**

AA Val 77 - Leu 233 (Accession # NP\_000585.2).

### Product Description

#### **Activity**

Yes

#### **Application**

SDS-PAGE, ELISA, SEC-MALS

#### **Expression Systems**

HEK293

#### **Tag**

No tag

#### **Protein Format**

Soluble

#### **Form**

LYOPH

### Reconstitution

Please see Certificate of Analysis for specific instructions.

### Endotoxin

<1.0 EU/μg by the LAL method

### Conjugation

Biotin

### Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

### Buffer

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

### Storage

Stored at lyophilized form at -20°C or lower. Avoid repeated freeze-thaw cycles.

The antigen can be stable for 12 months in lyophilized form after storage at -20°C to -80°C, 3 months under sterile conditions after reconstitution after storage at -80°C.

## Target

### Target Protein

TNF-alpha

### 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/TNFR2. 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

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

### Gene ID

[7124](#)

### UniProt ID

[P01375](#)