

# **Product Information**

# MemDX™ Antibody Discovery - Human Fc gamma RIIIA/CD16a (17-208) (V176) Membrane Protein, Partial, -His tag

Cat. No.: MP1424F

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

This membrane protein is Human Fc gamma RIIIA/CD16a (17-208) (V176). It has been tested in SDS-PAGE, SPR, BLI. We provide this protein to facilitate your membrane protein antibody discovery and development.

# **Product Specifications**

# **Host Species**

Human

#### **Target Protein**

Fc gamma RIIIA/CD16a

## **Protein Length**

**ECD** 

# **Molecular Weight**

The protein has a calculated MW of 23.7 kDa. The protein migrates as 40-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### Sequence

AA Gly 17 - Gln 208 (Accession # P08637-1).

# **Product Description**

### **Activity**

Yes

#### **Application**

SDS-PAGE, SPR, BLI

#### **Expression Systems**

**HEK293** 

#### Tag

His Tag at the C-terminus

#### **Protein Format**

Soluble

#### **Form**

#### LYOPH

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

#### **Endotoxin**

<1.0 EU/µg by the LAL method

#### **Purity**

>95% as determined by SDS-PAGE

#### **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 coditions after reconstitution after storage at -80°C.

### **Target**

#### **Target Protein**

Fc gamma RIIIA/CD16a

#### **Full Name**

Fc fragment of IgG receptor IIIa

#### Introduction

This gene encodes a receptor for the Fc portion of immunoglobulin G, and it is involved in the removal of antigenantibody complexes from the circulation, as well as other other antibody-dependent responses. This gene (FCGR3A) is highly similar to another nearby gene (FCGR3B) located on chromosome 1. The receptor encoded by this gene is expressed on natural killer (NK) cells as an integral membrane glycoprotein anchored through a transmembrane peptide, whereas FCGR3B is expressed on polymorphonuclear neutrophils (PMN) where the receptor is anchored through a phosphatidylinositol (PI) linkage. Mutations in this gene have been linked to susceptibility to recurrent viral infections, susceptibility to systemic lupus erythematosus, and alloimmune neonatal neutropenia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

#### **Alternative Names**

CD16; FCG3; CD16A; FCGR3; IGFR3; IMD20; FCR-10; FCRIII; FCGRIII; FCRIIIA; low affinity immunoglobulin gamma Fc region receptor III-A; CD16a antigen; Fc fragment of IgG, low affinity III, receptor for (CD16); Fc fragment of IgG, low affinity IIIa, receptor (CD16a); Fc gamma receptor III-A; Fc-gamma RIII-alpha; Fc-gamma receptor III-2 (CD 16); Fc-gamma receptor IIIb (CD16); FcgammaRIIIA; igG Fc receptor III-2; immunoglobulin G Fc receptor III; low affinity immunoglobulin gamma receptor III-a Fc fragment; neutrophil-specific antigen NA

#### Gene ID

2214

**UniProt ID** 

P08637