

## **Synonym**

MIC-A

### **Source**

Human MICA, Fc Tag(MIA-H5253) is expressed from human 293 cells (HEK293). It contains AA Glu 24 - Gln 308 (Accession # <u>AAH16929.1</u>). Predicted N-terminus: Glu 24

## **Molecular Characterization**

MICA(Glu 24- Gln 308) AAH16929.1

Fc(Pro 100 - Lys 330) P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 59.3 kDa. The protein migrates as 70-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

### **Storage**

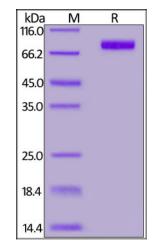
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human MICA, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

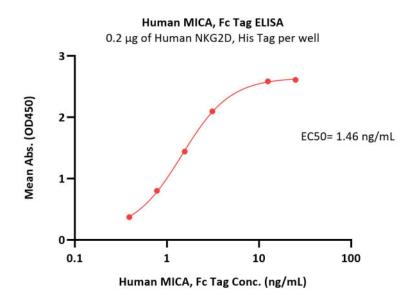
## **Bioactivity-ELISA**



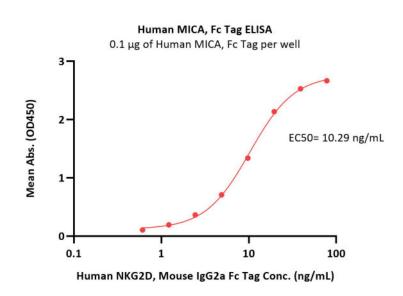
# **Human MICA Protein, Fc Tag**

Catalog # MIA-H5253





Immobilized Human NKG2D, His Tag (Cat. No. NKD-H5245) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human MICA, Fc Tag (Cat. No. MIA-H5253) with a linear range of 0.5-2 ng/mL (QC tested).



Immobilized Human MICA, Fc Tag (Cat. No. MIA-H5253) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Human NKG2D, Mouse IgG2a Fc Tag (Cat. No. NKD-H5259) with a linear range of 0.6-20 ng/mL (Routinely tested).

## Background

MHC class I polypeptide-related sequence A (MICA) belongs to the MHC class I family and MIC subfamily. MICA contains one Ig-like C1-type (immunoglobulin-like) domain. Unlike classical MHC class I molecules, MICA does not form a heterodimer with beta-2-microglobulin. MICA acts as a stress-induced self-antigen that is recognized by gamma delta T-cells. MICA is ligand for the KLRK1/NKG2D receptor. MICA bind to KLRK1 leads to cell lysis.

# **Clinical and Translational Updates**

