

# Recombinant Human MHC class I polypeptide-related sequence A/MIC-A Protein

**Catalog No.: RP00172** **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	100507436	Q29983

### Tags

C-His

### Synonyms

MICA; MIC-A; PERB11.1; MHC class I polypeptide-related sequence A; MIC-A; PERB11.1

## Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE.

Calculated MW	Observed MW
35.88 kDa	50-70 kDa

### Endotoxin

&lt; 0.1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

 | 400-999-6126

 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)
 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

MHC class I chain-related molecules A (MICA) is one of the genes in the HLA class I region, which belongs to MHC class I family. It is the member of the non-classical class I family that displays the greatest degree of polymorphism. The MICA protein product is expressed on the cell surface, although unlike canonical class I molecules it does not seem to associate with beta-2-microglobulin. It is a ligand for the NKG2-D type II integral membrane protein receptor. The protein functions as a stress-induced antigen that is broadly recognized by intestinal epithelial gamma delta T cells. Variations in this gene have been associated with susceptibility to psoriasis 1 and psoriatic arthritis, and the shedding of MICA-related antibodies and ligands is involved in the progression from monoclonal gammopathy of undetermined significance to multiple myeloma.

## Basic Information

### Description

Recombinant Human MHC class I polypeptide-related sequence A/MIC-A Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Gln308) of human MICA (Accession #NP\_000238.1) fused with a 6xHis tag at the C-terminus.

### Bio-Activity

Measured by its binding ability in a functional ELISA. Immobilized Human MICA Protein at 2 μg/mL (100 μL/well) can bind NKG2D with a linear range of 0.61-14.3 ng/mL.

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

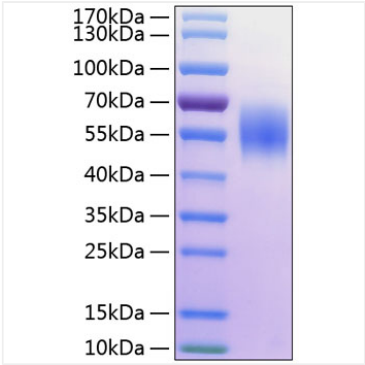
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

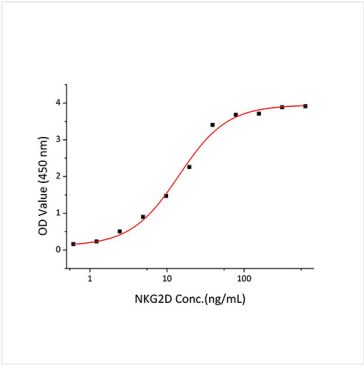
### Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Validation Data



Recombinant Human MHC class I polypeptide-related sequence A/MIC-A Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized Recombinant Human MICA Protein at 2  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) can bind NKG2D with a linear range of 0.61-14.3 ng/mL.