

Human MICA Protein

Cat. No. MIC-HM20A



Description

| | |
|-------------------------|---|
| Source | Recombinant Human MICA Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Glu24-Gln308. |
| Accession | Q96QC4 |
| Molecular Weight | The protein has a predicted MW of 59.64 kDa. Due to glycosylation, the protein migrates to 75-85 kDa based on Tris-Bis PAGE result. |
| Endotoxin | Less than 1EU per µg by the LAL method. |
| Purity | > 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC |

Formulation and Storage

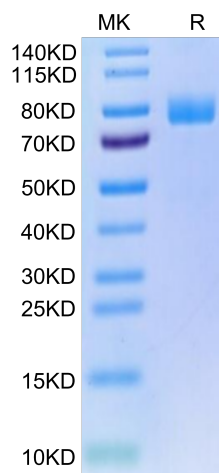
| | |
|-----------------------|---|
| Formulation | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

Background

MICA (MHC class I chain-related gene A) is a transmembrane glycoprotein that functions as a ligand for human NKG2D. A closely related protein, MICB, shares 85% amino acid identity with MICA. These proteins are distantly related to the MHC class I proteins. They possess three extracellular Iglike domains, but they have no capacity to bind peptide or interact with beta 2-microglobulin..

Assay Data

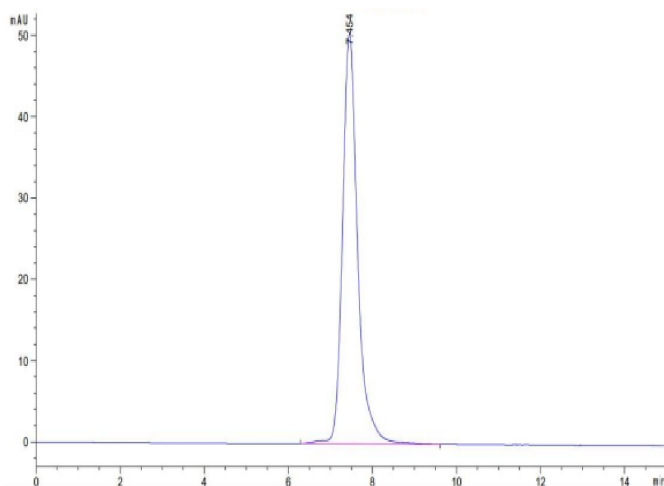
Tris-Bis PAGE



Human MICA on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data

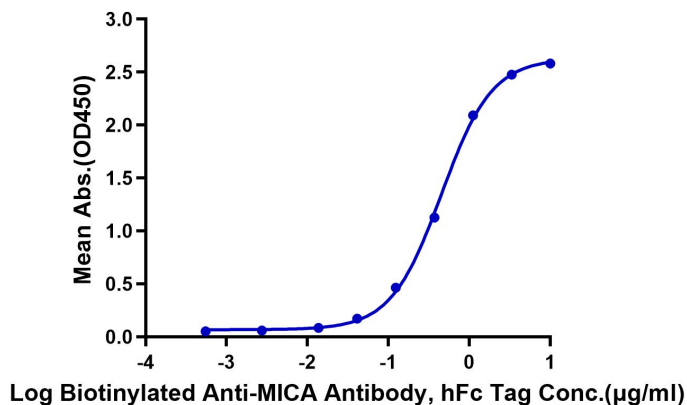


The purity of Human MICA is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human MICA, hFc Tag ELISA

0.2µg Human MICA, hFc Tag Per Well

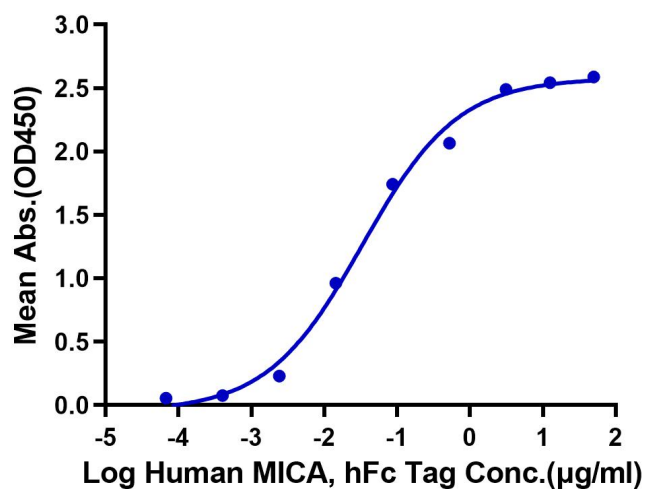


Immobilized Human MICA, hFc Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Anti-MICA Antibody, hFc Tag with the EC50 of 0.45µg/ml determined by ELISA (QC Test).

ELISA Data

Human MICA, hFc Tag ELISA

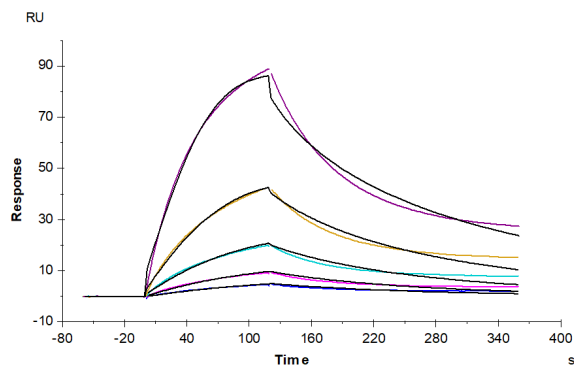
0.5µg Human NKG2D, His Tag Per Well



Immobilized Human NKG2D, His Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human MICA, hFc Tag with the EC50 of 33.4ng/ml determined by ELISA.

SPR Data

Assay Data



Human MICA, hFc Tag captured on CM5 Chip via Protein A can bind Human NKG2D, His Tag with an affinity constant of 0.36 μM as determined in SPR assay (Biacore T200).