

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 Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

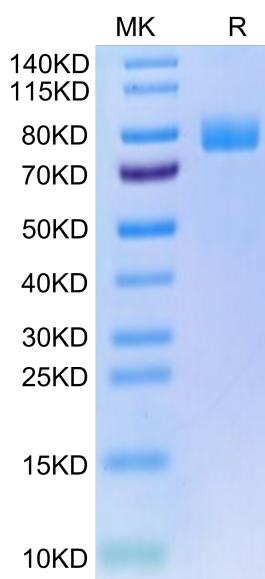
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months 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

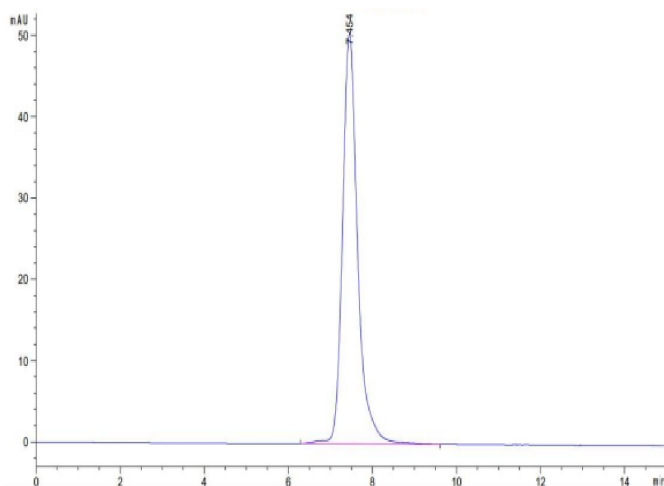
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

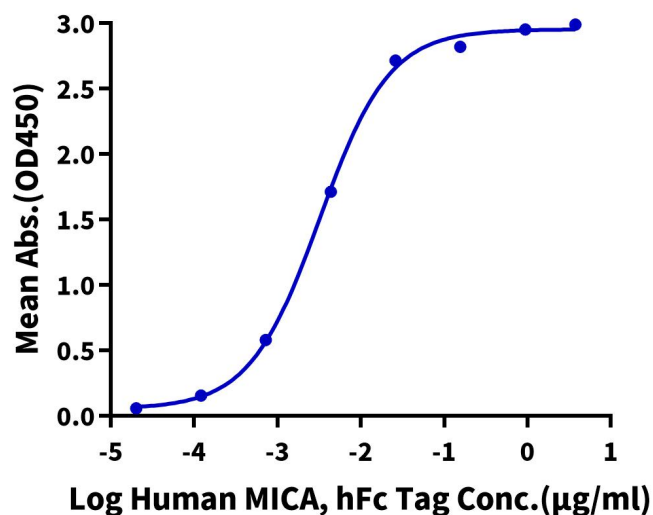


The purity of Human MICA is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human MICA, hFc Tag ELISA

0.5µg Human NKG2D, His Tag Per Well

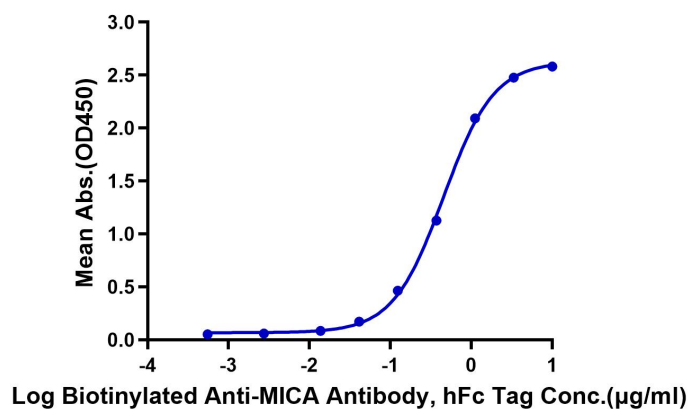


Immobilized Human NKG2D, His Tag at 5µg/ml (100µl/Well) on the plate. Dose response curve for Human MICA, hFc Tag with the EC50 of 3.2ng/ml determined by ELISA (QC Test).

ELISA Data

Human MICA, hFc Tag ELISA

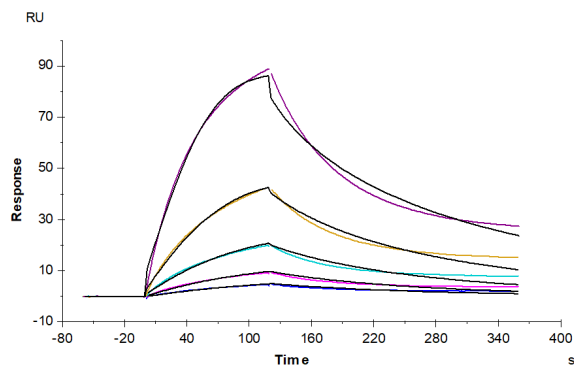
0.2µg Human MICA, hFc Tag Per Well



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.

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 μ M as determined in SPR assay (Biacore T200).