

Human MICB Protein

Cat. No. MIC-HM20B



Description

Source	Recombinant Human MICB Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Ala23-Gly298.
Accession	Q29980-1
Molecular Weight	The protein has a predicted MW of 58.21 kDa. Due to glycosylation, the protein migrates to 70-80 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

MICB (MHC class I chain-related gene B) is a transmembrane glycoprotein that functions as a ligand for NKG2D. A closely related protein, MICA, shares 85% amino acid identity with MICB. MICB seems to have no role in antigen presentation. Acts as a stress-induced self-antigen that is recognized by gamma delta T cells. Ligand for the KLRK1/NKG2D receptor. Binding to KLRK1 leads to cell lysis.

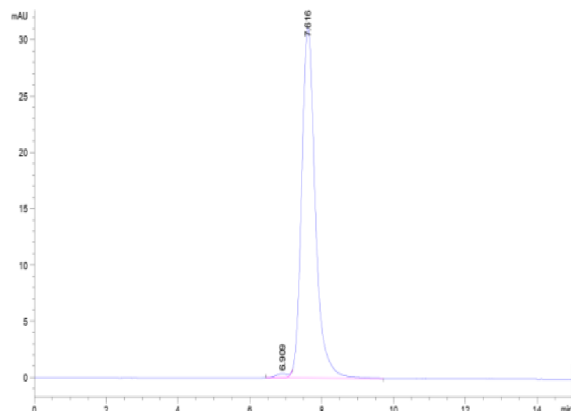
Assay Data

Bis-Tris PAGE



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

SEC-HPLC

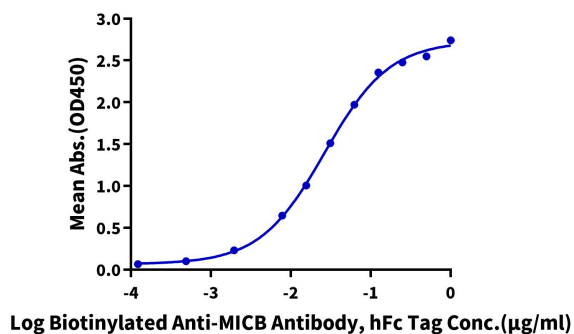


The purity of Human MICB is greater than 95% as determined by SEC-HPLC.

Assay Data

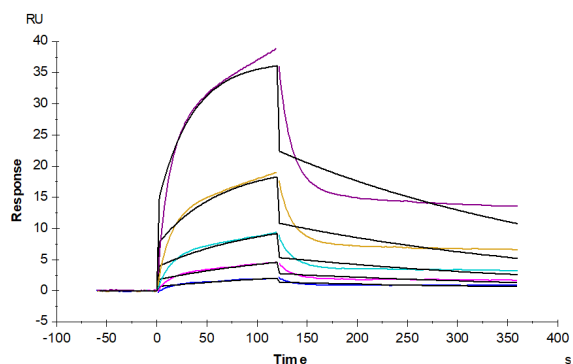
ELISA Data

Human MICB, hFc Tag ELISA
0.2µg Human MICB, hFc Tag Per Well



Immobilized Human MICB, hFc Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Biotinylated Anti-MICB Antibody, hFc Tag with the EC50 of 26.6ng/ml determined by ELISA (QC Test).

SPR Data



Human MICB, hFc Tag captured on CM5 Chip via Protein A can bind Human NKG2D, His Tag with an affinity constant of 95.15 nM as determined in SPR assay (Biacore T200).