

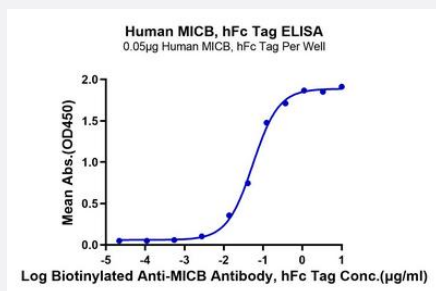
Bioactive

HuPro®

MICB (Human) Recombinant Protein

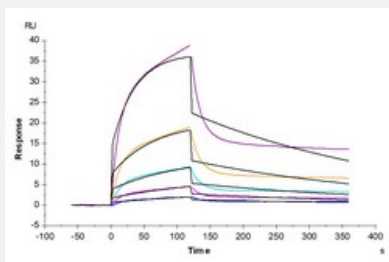
Catalog # P9712 Size 100 ug

Applications



Enzyme-linked Immunoabsorbent Assay

Immobilized Human MICB, hFc Tag at 0.5 ug/mL (100 uL/Well) on the plate. Dose response curve for Biotinylated Anti-MICB Antibody, hFc Tag with the EC50 of 54.9 ng/mL determined by ELISA (QC Test).



Surface Plasmon Resonance

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).



SEC-HPLC

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).

Tris-Bis PAGE

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

Specification

Product Description	Human MICB (Q29980-1, 23 a.a. - 298 a.a.) partial recombinant protein with hFc tag at C-terminus expressed in HEK293 cells.
Sequence	AEPHSLRYNLMVLSQDGSVQSGFLAEGHLDGQPFLRYDRQKRRAKPQQGQWAENVLGAKTWDT ETEDLTENGQDLRRTLTHIKDQKGGHLHSLQEIRVCEIHEDSSTRGSRHFYDGEFLSQNLETQES TVPQSSRAQTLAMNVTNFWKEDAMKTKTHYRAMQADCLQKLQRYLKSGVAIRRTVPPMVNVTCS EVSEGNITVTCRASSFYPRNITLTWRQDGVSLSHNTQQWGDVLPDGNGTYQTWWATRIRQGEEQR FTCYMEHSGNHGTHPVPSPG
Host	Human
Theoretical MW (kDa)	58.21
Form	Liquid
Preparation Method	Mammalian cell (Expi293, high-yield transient HEK293) expression system
Purity	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Activity	The EC ₅₀ was 54.9 ng/mL, measured by ELISA at 0.5 ug/mL.
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC Human MICB, hFc Tag captured on CM5 Chip via Protein A can bind Human NKG2D, His Tag with a n affinity constant of 95.15 nM as determined in SPR assay (Biacore T200). Tris-Bis PAGE Human MICB on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
Recommend Usage	Biological Activity ELISA SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS pH 7.4

Storage Instruction

Store at -80°C for 12 Month.
Aliquot to avoid repeated freezing and thawing.

Note

Result of bioactivity analysis

Applications

- Enzyme-linked Immunoabsorbent Assay

Immobilized Human MICB, hFc Tag at 0.5 ug/mL (100 uL/Well) on the plate. Dose response curve for Biotinylated Anti-MICB Antibody, hFc Tag with the EC50 of 54.9 ng/mL determined by ELISA (QC Test).

- Functional Study

- SDS-PAGE

- Surface Plasmon Resonance

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Gene Info — MICB

Entrez GeneID[4277](#)**Protein Accession#**[Q29980-1](#)**Gene Name**

MICB

Gene Alias

PERB11.2

Gene Description

MHC class I polypeptide-related sequence B

Omim ID[602436](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

This gene encodes a heavily glycosylated protein which is a ligand for the NKG2D type II receptor. Binding of the ligand activates the cytolytic response of natural killer (NK) cells, CD8 alphabeta T cells, and gammadelta T cells which express the receptor. This protein is stress-induced and is similar to MHC class I molecules; however, it does not associate with beta-2-microglobulin or bind peptides. [provided by RefSeq]

Other Designations

MHC class I chain-related protein B|MHC class I mic-B antigen|MHC class I molecule|MHC class I-like molecule PERB11.2-IMX|OTTHUMP00000029089|OTTHUMP00000035091|OTTHUMP00000035588|stress inducible class I homolog

Pathway

- [Natural killer cell mediated cytotoxicity](#)

Disease

- [Acquired Immunodeficiency Syndrome](#)
- [Alzheimer disease](#)
- [Arthritis](#)
- [Asthma](#)
- [Behcet Syndrome](#)
- [Cardiomyopathy](#)
- [Celiac Disease](#)
- [Cognition Disorders](#)
- [Colitis](#)
- [Cytomegalovirus Infections](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Genetic Predisposition to Disease](#)
- [Heart Diseases](#)
- [Herpesviridae Infections](#)
- [HIV Seropositivity](#)
- [Inflammatory Bowel Diseases](#)
- [Leprosy](#)
- [Lung Diseases](#)
- [Lupus Erythematosus](#)
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- [Multiple Sclerosis](#)
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- [Psychiatric Status Rating Scales](#)
- [Schizophrenia](#)
- [Uterine Cervical Neoplasms](#)