9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

MICB Human

MHC Class-I chain related gene B Human Recombinant
RCP1367

Product Overview

Name	MICB Human
Description	
MHC Class-I chain related gene B Human Recombinant	
Accession (Primary)	Q29980
Synonyms	
MHC class I polypeptide-related sequence B, MIC-B, MICB, PERB11.2.	
Introduction	
MICB (MHC class I chain-related gene B) is a transmembrane glycoprotein that functions as a ligand for human NKG2D type II receptor. A closely related protein, MICA, shares 85% amino acid identity with MICB. These 2 proteins are distantly related to the MHC class I proteins. MICA and MICB (MICA/B) possess three extracellular immunoglobulin-like domains, but have no capacity to bind peptide or interact with ?2-microglobulin. The genes encoding MICA/B are found within the major histocompatibility complex on human chromosome 6. The MICB locus is polymorphic with more than 15 recognized human alleles. MICA/B are minimally expressed on normal cells, but are frequently expressed on epithelial tumors and can be induced by bacterial and viral infections. MICA/B are ligands for NKG2D, an activating receptor expressed on NK cells, NKT cells, ?? T cells, and CD8+ ?? T cells. Recognition of MICA/B by NKG2D results in the activation of cytolytic activity and/or cytokine production by these effector cells. MICA/B recognition is involved in tumor surveillance, viral infections, and autoimmune diseases. The release of soluble forms of MICA/B from tumors down-regulates NKG2D surface expression on effector cells resulting in the impairment of anti-tumor immune response.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from a concentrated (1mg/ml) solution containing no additives.	
Stability	
Lyophilized MICB although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution MICB should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage	

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it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by(a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Biological Activity

Measured by its ability to bind MICB antibody in ELISA.

Solubility

It is recommended to reconstitute the lyophilized MICB in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

MICB Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q29980)