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32-4209: Recombinant Human MHC class I chain-related gene B

Alternative Name : MHC class I polypeptide-related sequence B,MIC-B,MICB,PERB11.2.

Description

Source : Escherichia Coli. MICB Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 326 amino acids and having a molecular mass of 37kDa. The sequence contains the extracellular domain of the mature human MICB (amino acid residues Ala23 - Tyr312). The MICB is purified by proprietary chromatographic techniques. 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.

Product Info

Amount :	10 µg
Purification :	Greater than 95.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	Lyophilized from a concentrated (1mg/ml) solution containing no additives.
Storage condition :	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 it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.