

## 32-13321: MICA Human, His

**Alternative Name :** MHC class I polypeptide-related sequence A, MIC-A, MICA, PERB11.1, HLA-B, AS, HLAB, HLAC, SPDA1, HLA-B73, HLA-B-7301.

### Description

Source: Escherichia Coli.

Sterile Filtered clear solution.

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 Ig-like domains, but they have no capacity to bind peptide or interact with 2-microglobulin. The genes encoding these proteins are found within the Major Histocompatibility Complex on human chromosome 6. The MICA locus is highly polymorphic with more than 50 recognized human alleles. MICA is absent from most cells but is frequently expressed in epithelial tumors and can be induced by bacterial and viral infections. MICA is a ligand for human NKG2D, an activating receptor expressed on NK cells, NKT cells, gamma delta T cells, and CD8+ beta T cells. Recognition of MICA by NKG2D results in the activation of cytolytic activity and/or cytokine production by these effector cells. MICA recognition is involved in tumor surveillance, viral infections, and autoimmune diseases.

MICA Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 283 amino acids (24-297aa) and having a molecular mass of 32.7kDa. MICA is fused to an 8 amino acid His-tag at C-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** MICA protein solution (0.25mg/ml) containing Phosphate buffered saline (pH7.4), 10% glycerol and 1mM DTT.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MEPHSLRYNL TVLSWDGVSQ SGFLTEVHLD GQPFLRCDRQ KCRAPQGQW AEDVLGNKWT  
DRETRDLTGN GKDLRMTLAH IKDQKEGLHS LQEIRVCEIH EDNSTRSSQH FYYDGELFLS QNLETEEWTM  
PQSSRAQTLA MNVRNFLKED AMKTKTHYHA MHADCLQELR RYLKSGVVLRTVPPMVNVT RSEASEGNIT  
VTCRASGFYP WNITLSWRQD GVSLSHDTQQ WGDVLPDGNG TYQTWWATRI CQGEEQRFTC  
YMEHSGNHST HPVPSLEHHH HHH.