MICA
Recombinant Human MICA

Catalog No.	CRM127A CRM127C	**Quantity:**	10 µg 1.0 mg
Alternate Names:	MHC class I polypeptide-related sequence A, MIC-A		
Description:	MIC-A is a transmembrane glycoprotein that functions as a ligand for human NKG2D an activating receptor expressed on NK cells, NKT cells, γδ T cells, and CD8+ αβ T cells. Recognition of MICA by NKG2D results in the activation of cytolytic activity and/or cytokine production by these effector cells. . 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 β2-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 recognition is involved in tumor surveillance, viral infections, and autoimmune diseases.		
UniProt ID:	Q29983		
Concentration:	1 mg/ml prior to lyophilization		
Source:	*E. coli*		
Molecular Weight:	36 kDa (320 aa) The sequence contains the full length extracellular domain of the mature human MICA (amino acid residues Ala23 – Gln308)		
Formulation:	Lyophilized from sterile-filtered 30 % Acetonitrile, 0.1% TFA.		
Purity:	>95% by SDS-PAGE and HPLC		
Endotoxin Level:	<1 EU/µg of rHuMIC-A as determined by LAL method.		
Amino Acid Sequence:	EPHSLRYNLTVLSWDGSVQSGFLAEVHLDGQPFLRYDRQKCRAPQGQWAEDVLGNKT WDRETRDLTGNGKDLRMTLAHIKDQKEGLHLQEIRVCEIHEDNSTRSSQHFYYDGELFL SQNLETEEWTVPQSSRAQLAMNVRNFLKEDAMKTKTHYHAMHADCLQELRRYLESGV VLRRTVPMVNVTRSEASEGNITVTCRASSFYPRNIILTWRQDGVSLSHDTQQWGVLPD GNGTYQTWVATRICRGEEQRFTCYMEHSGNHSTHPVPSGKVLLQSH		
Reconstitution:	**Centrifuge vial prior to opening.** Reconstitute in sterile distilled water to 0.1-1.0 mg/mL. Further dilution should be made in appropriate buffered solutions.		
Storage & Stability:	Store the lyophilized product at -20°C to -80°C for up to 1 year. Upon reconstitution, the stock solution is stable for up to one week at 2-8°C or longer in working aliquots at -20°C to -80°C. It is recommended to add a carrier protein such as 0.1% BSA for long-term storage. **Avoid repeated freeze/thaw cycles.**		

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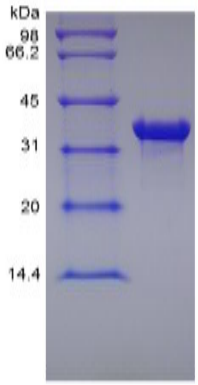

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