Recombinant Human MHC Class I Polypeptide-Related Sequence A, His

Catalog No: #AP60441



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Package Size: #AP60441-1 10ug #AP60441-2 100ug #AP60441-3 500ug

Description	
Product Name	Recombinant Human MHC Class I Polypeptide-Related Sequence A, His
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Calculated MW	Approximately 36.9 kDa, a single non-glycosylated polypeptide chain containing 320 amino acids.
Target Sequence	MSYYHHHHHH DYDIPTTENL YFQGAMDPEF EPHSLRYNLT VLSWDGSVQS GFLAEVHLDG
	QPFLRYDRQK CRAKPQGQWA EDVLGNKTWD RETRDLTGNG KDLRMTLAHI KDQKEGLHSL
	QEIRVCEIHE DNSTRSSQHF YYDGELFLSQ NLETEEWTVP QSSRAQTLAM NVRNFLKEDA MKTKTHYHAM
	HADCLQELRR YLESGVVLRR TVPPMVNVTR SEASEGNITV TCRASSFYPR NIILTWRQDG VSLSHDTQQW
	GDVLPDGNGT YQTWVATRIC RGEEQRFTCY MEHSGNHSTH PVPSGKVLVL QSHKLGCFGG
Formulation	Supplied as a 0.2 μm filtered concentrated sterile solution in PBS, pH 7.4, and 8 M Urea.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.Refer to lot specific COA for the Use by
	Date when stored at β -20 °C as supplied.

Background

MIC-A (MHC class I chain-related gene A) is a single-pass type I member protein. It is expressed on the cell surface in gastric epithelium, endothelial cells and fibroblasts and in the cytoplasm in keratinocytes and monocytes. Additionally, MIC-A can be induced by bacterial and viral infections. It shares 85 % amino acid identity with MIC-B and they are distantly related to the MHC class I proteins. Because they possess three extracellular Ig-like domains, but unlike classical MHC class I molecules. They do not form a heterodimer with beta2 microglobulin, but bind as a monomer to a KLRK1/NKG2D that is 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. MIC-A recognition plays an important role in tumor surveillance, viral infections, and autoimmune diseases.

Note: This product is for in vitro research use only