Recombinant Human MHC Class I Polypeptide-Related Sequence B

Catalog No: #AP60442

Package Size: #AP60442-1 10ug   #AP60442-2 100ug   #AP60442-3 500ug

Description

Product Name	Recombinant Human MHC Class I Polypeptide-Related Sequence B
Host Species	Escherichia coli.
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Calculated MW	Approximately 32.8 kDa, a single non-glycosylated polypeptide chain containing 287 amino acids.
Target Sequence	AEPHSLRYNL MVLSQDESVQ SGFLAEGHLD GQPFLRYDRQ KRRAKPQGQW AEDVLGAKTW DTETEDLTEN GQDLRRTLTH IKDQKGGLHS LQEIRVCEIH EDSSTRGSRH FYYDGELFLS QNLETQESTV PQSSRAQTLA MNVTNFWKED AMKTKTHYRA MQADCLQKLQ RYLKSGVAIR RTVPPMVNVT CSEVSEGNIT VTCRASSFYP RNITLTWRQD GVSLSHNTQQ WGDVLPDGNG TYQTWVATRI RQGEEQRFTC YMEHSGNHGT HPVPSGKVLV LQSQRTD
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris, 150 mM NaCl, pH 8.0.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.- 12 months from date of receipt, -20 to -70 °C as supplied.- 1 month, 2 to 8 °C under sterile conditions after reconstitution.- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Background

MIC-B (MHC class I chain-related gene B) is a single-pass type I member protein. It is widely expressed in many, but not all, epithelial tumors of lung, breast, kidney, ovary, prostate and colon. In addition to this, it is produced by hepatocellular carcinomas, which is only in tumor cells but not in surrounding non-cancerous tissue and can be induced by bacterial and viral infections. MIC-B shares 85% amino acid identity with MIC-A 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+ &#945β T cells. Recognition of MIC-B by NKG2D results in the activation of cytolytic activity and/or cytokine production by these effector cells. MIC-B recognition plays an important role in tumor surveillance, viral infections, and autoimmune diseases.

Note: This product is for in vitro research use only