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32-7442: Recombinant Human MHC Class I Polypeptide-Related Sequence A/MICA (C-6His)(Discontinued)

Gene : MICA **Gene ID :** 100507436 **Uniprot ID :** Q29983

Description

Source: Human Cells. MW :33.87kD.

Recombinant Human MHC Class I-related Protein A is produced by our Mammalian expression system and the target gene encoding Glu24-Gln308 is expressed with a 6His tag at the C-terminus. MHC Class I Polypeptide-Related Sequence A (MICA) is a transmembrane glycoprotein that functions as a ligand for human NKG2D. Unlike classical MHC class I molecules, MICA does not form a heterodimer with beta-2-microglobulin. MICA shares 85% amino acid identity with a closely related protein, MICB. MICA acts as a stress-induced self-antigen that is recognized by NK cells, NKT cells, and most of the subtypes of T cells. As a Ligand for the KLRK1/NKG2D receptor, MICA binds to KLRK1 leads to cell lysis. MICA functions as an antigen for gamma delta T cells and is frequently expressed in epithelial tumors. MICA antigens are able to elicit the synthesis of alloantibodies in transplant recipients. Studies have shown that anti-MICA antibodies are associated with acute renal allograft rejection and failure. MICA recognition is involved in tumor surveillance, viral infections, and autoimmune diseases.

Product Info

Amount: 10 μg / 50 μg

Content: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks.

Storage condition: Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted

samples are stable at -20 $^{\circ}\text{C}$ for 3 months.

Amino Acid: EPHSLRYNLTVLSWDGSVQSGFLTEVHLDGQPFLRCDRQKCRAKPQGQWAEDVLGNKTWDRETRDLTGNG

KDLRMTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNLETEEWTMPQSSRAQTLAMNVR NFLKEDAMKTKTHYHAMHADCLQELRRYLKSGVVLRRTVPPMVNVTRSEASEGNITVTCRASGFYPWNITLSW RQDGVSLSHDTQQWGDVLPDGNGTYQTWVATRICQGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQV

DHHHHHH

Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 $\tilde{A} \square \hat{A} \mu g/ml$. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin: Less than 0.1 ng/ $\tilde{A} \square \hat{A} \mu g$ (1 IEU/ $\tilde{A} \square \hat{A} \mu g$) as determined by LAL test.