

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.
Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.
Amino Acid : EPHSLRYNLTVLSWDGSGFLTEVHLDGQPFLRCDRQKCRAPQGQWAEDVLGNKTWDRETRDLTGNG
KDLRMTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNLETEEWTPQSSRAQTLAMNVR
NFLKEDAMKTKTHYHAMHADCLQELRRYLKSGVLLRRTVPPMVNVTRESESEGNITVTCRASGFYPWNITLSW
RQDGVSLSHDTQQWGDVLPDGNNGTYQTWWATRICQGEERFTCYMEHSGNHSTHPVPSGKVLVLQSHWQV
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 µg/ml. Dissolve the lyophilized protein in ddH₂O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.