Recombinant Protein Technical Manual

Recombinant Human MICA Protein (His Tag)(Active)

RPES2133

Product Data:

Product SKU: RPES2133

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: AAH16929.1

Protein Information:

Molecular Mass:	33.9 kDa
AP Molecular Mass:	60 kDa
Tag:	C-6His
Bio-activity:	Immobilized Human NKG2DL-Fc(Cat: PKSH032815) at 10µg/ml(100 µl/well) can bind Human MICA-His.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	MHC Class I Polypeptide-Related Sequence A; MIC-A; MICA; PERB11.1

Immunogen Information:

Sequence: Glu24-Gln308

Background:

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.