

Recombinant Human MICA (C-6His)

Catalog No: C489

Description Recombinant Human MHC Class I Polypeptide-Related Sequence 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.

Source **Human Cells**

Alternative name MHC Class I Polypeptide-Related Sequence A; MIC-A; MICA; PERB11.1

Predicted Molecular 25.1kDa

Weight

AP Molecular Weight

31kDa, reducing conditions.

Accession No. AAH16929.1

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Quality Control Greater than 95% as determined by reducing SDS-PAGE. Purity:

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

Shipping The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

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

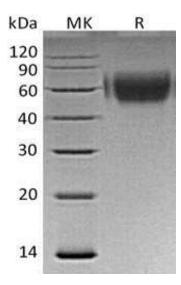
> Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

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.

SDS-Page



MK: Marker

R: Sample under reducing conditions

