

## Human MICA ELISA Kit | MICA elisa kit

Human MICA PicoKine ELISA Kit

CATALOG #  
**AAA45341**

REACTIVITY  
**Human**

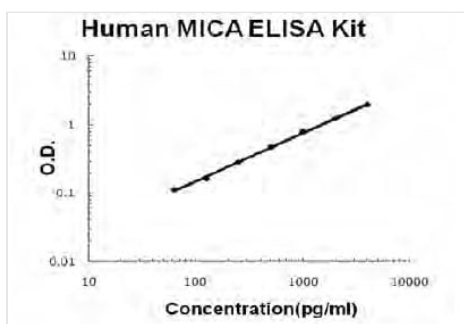
### PRODUCT SYNONYMS

MICA; Human MICA PicoKine ELISA Kit; MHC class I polypeptide-related sequence A; FLJ60820; HLA class I antigen; MGC111087; MHC class I chain related gene A protein; MHC class I chain related protein A; MHC class I polypeptide related sequence A; MHC class I related protein; MIC A; PERB11.1; Stress inducible class I homolog; MICA elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                     |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Human                                                                                                                                               |
| Specificity             | Natural and recombinant Human MICA                                                                                                                  |
| Sequence Length         | 383                                                                                                                                                 |
| Samples                 | Cell culture supernates, cell lysates and serum                                                                                                     |
| Detection Range         | 62.5pg/ml-4000pg/ml                                                                                                                                 |
| Sensitivity             | <10pg/ml                                                                                                                                            |
| Intra-assay Precision   | Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.   |
| Inter-assay Precision   | Inter-Assay Precision (Precision across assays):Three samples of known concentration were tested in separate assays to assess interassay precision. |
| Preparation and Storage | Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles (Shipped with wet ice.)                          |

### IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for MICA elisa kit | <p>Principle of the Assay: The Picokine™ Human MICA Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human MICA with a 96-well strip plate that is pre-coated with antibody specific for MICA. The detection antibody is a biotinylated antibody specific for MICA. The capture antibody is monoclonal antibody from mouse, the detection antibody is polyclonal antibody from goat. The kit contains recombinant Human MICA with immunogen: Expression system for standard: NSO; Immunogen sequence: E24-W307. The kit is analytically validated with ready to use reagents. To measure Human MICA, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Human MICA in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human MICA in the sample.</p> <p>Background/Introduction: MHC class I polypeptide-related sequence A is a protein that in humans is encoded by the MICA gene.<sup>1</sup> The MICA gene encodes a 383-amino acid polypeptide with a predicted mass of 43 kD. The MICA and MICB genes occur in a 200-kb region spanning the TNFA and TNFB cluster at 6p21.3.<sup>2</sup> MICA and the closely related MICB were recognized by intestinal epithelial T cells expressing diverse V-delta-1 gamma/delta TCRs.<sup>3</sup> The MICA protein product is expressed on the cell surface, although unlike canonical class I molecules does not seem to associate with beta-2-microglobulin. It is further distinguished by its unusual exon-intron organization and preferential expression in fibroblasts and epithelial cells. It is thought that MICA functions as a stress-induced antigen that is broadly recognized by NK cells, NKT cells, and most of the subtypes of T cells. MICA and other members of this family may have been selected for specialized functions that are either ancient or derived from those of typical MHC class I genes, in analogy to some of the nonclassic mouse H-2 genes.</p> |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                            |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 74740024                                                                                                                                                                   |
| NCBI GeneID                      | 100507436                                                                                                                                                                  |
| UniProt Accession #              | Q29983; O60917; O60918; O60919; O60920; O60933; O77956; O78150; A8KQR0; A9LRW5; A9QVE0; B1VJF1                                                                             |
| Molecular Weight                 | 31,577 Da                                                                                                                                                                  |
| NCBI Official Full Name          | MHC class I polypeptide-related sequence A                                                                                                                                 |
| NCBI Official Synonym Full Names | MHC class I polypeptide-related sequence A                                                                                                                                 |
| NCBI Official Symbol             | MICA                                                                                                                                                                       |
| NCBI Official Synonym Symbols    | MIC-A; PERB11.1                                                                                                                                                            |
| NCBI Protein Information         | MHC class I polypeptide-related sequence A; HLA class I antigen; stress inducible class I homolog; MICA {ECO:0000312 EMBL:CAI41907.1}; MHC class I chain-related protein A |
| UniProt Protein Name             | MHC class I polypeptide-related sequence A                                                                                                                                 |
| UniProt Gene Name                | MICA                                                                                                                                                                       |
| UniProt Synonym Gene Names       | MIC-A                                                                                                                                                                      |
| UniProt Entry Name               | MICA_HUMAN                                                                                                                                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.