



Recombinant Protein Technical Manual
Recombinant Human MICB Protein (His Tag)(Active)
RPES3082

Product Data:

Product SKU: RPES3082

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_005922.2

Protein Information:

Molecular Mass: 33 kDa

AP Molecular Mass: 45-50 kDa

Tag: C-His

Bio-activity: Immobilized human MICB-His at 10 µg/ml (100 µl/well) can bind human NKG2D, The EC50 of human NKG2D is 0.52.2 µg/ml.

Purity: > 98 % 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°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: PERB11.2

Immunogen Information:

Sequence: Met 1-Gly 298

Background:

MHC class I polypeptide-related sequence B, also known as MICB, is a heavily glycosylated protein serving as a ligand for the type I I receptor NKG2D. MICB shares 85% amino acid identity with MICA, a closely related protein, both of which contain three extracellular immunoglobulin-like domains, but without capacity to bind peptide or interact with beta-2-microglobulin. acting as a stress-induced self-antigen, binding of MICB to the NKG2D receptor activates the cytolytic response of natural killer (NK) cells, CD8+ $\alpha\beta$ T cells, and $\gamma\delta$ T cells on which the receptor is expressed. MICA/B are minimally expressed on normal cells, but are frequently expressed on epithelial tumors and can be induced by bacterial and viral infections. MICA/B recognition thus is involved in tumor surveillance, viral infections, and autoimmune diseases.