

## Recombinant Human MICB Protein (His Tag)

**Catalog Number:** PDMH100355

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

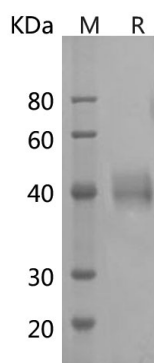
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human MICB protein Met1-Gly298, with an C-terminal His
<b>Calculated MW</b>	33 kDa
<b>Observed MW</b>	45-50 kDa
<b>Accession</b>	Q29980
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



> 98 % as determined by reducing SDS-PAGE.

### 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 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+αβ T cells, and γδ 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.

### For Research Use Only