## **Recombinant Human MICB Protein (His Tag)**

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

Catalog Number: PDMH100355



Description **Species** Human Mol Mass 33 kDa Accession O29980 Not validated for activity **Bio-activity Properties** > 95% as determined by reducing SDS-PAGE. Purity Endotoxin < 1.0 EU/mg of the protein as determined by the LAL method Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at  $< -20^{\circ}$ C for 3 months. This product is provided as lyophilized powder which is shipped with ice packs. Shipping Formulation Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol. Reconstitution 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 Κ

Da	Μ	R	
80 60	-		
40		-	
30		8	
20	-	4	

> 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&nbsp,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.

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