

PRODUCT INFORMATION

Target	MICA
Synonyms	MIC-A;PERB11.1
Description	Recombinant Human MICA Protein with C-terminal 6×His tag
Delivery	In Stock
Uniprot ID	Q29983
Expression Host	HEK293
Tag	C-6×His Tag
Molecular Characterization	MICA (Glu24-Trp307) 6×His tag
Molecular Weight	The protein has a predicted molecular mass of 33.5 kDa after removal of the signal peptide. The apparent molecular mass of MICA-His is approximately 55-70 kDa due to glycosylation.
Purity	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
Storage & Shipping	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
Background	This gene encodes the highly polymorphic major histocompatibility complex class I chain-related protein A. The protein product is expressed on the cell surface, although unlike canonical class I molecules it does not seem to associate with beta-2-microglobulin. It is a ligand for the NKG2-D type II integral membrane protein receptor. The protein functions as a stress-induced antigen that is broadly recognized by intestinal epithelial gamma delta T cells. Variations in this gene have been associated with susceptibility to psoriasis 1 and psoriatic arthritis, and the shedding of MICA-related antibodies and ligands is involved in the progression from monoclonal gammopathy of undetermined significance to multiple myeloma. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jan 2014]
Usage	Research use only
Conjugate	Unconjugated



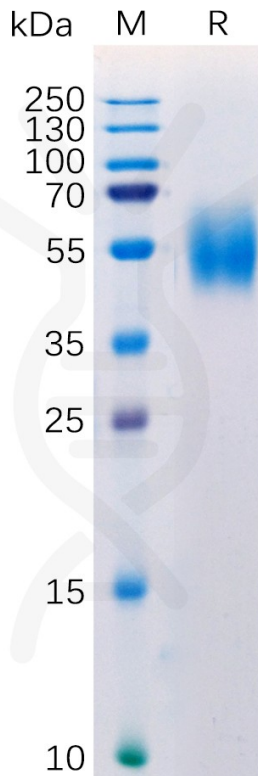


Figure 1. Human MICA Protein, His Tag on SDS-PAGE under reducing condition.

Human MICA, His Tagged protein ELISA

0.2 μg of MICA, His Tagged protein per well

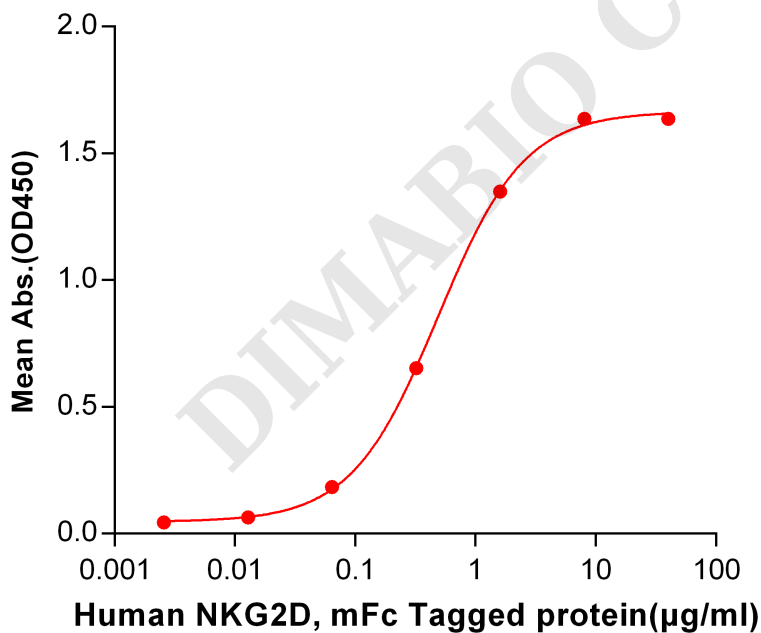


Figure 2. ELISA plate pre-coated by 2 $\mu\text{g/ml}$ (100 $\mu\text{l/well}$) Human MICA, His tagged protein (PME100349) can bind Human NKG2D, mFc tagged protein (PME100079) in a linear range of 0.064-1.6 $\mu\text{g/ml}$.



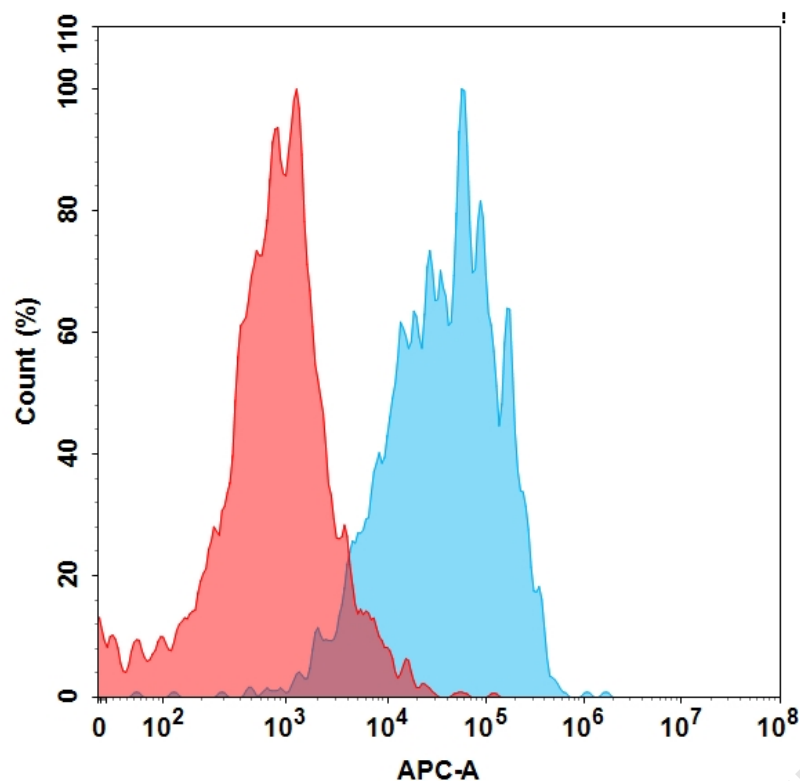


Figure 3. Flow cytometry analysis with 15 $\mu\text{g}/\text{mL}$ Human MICA Protein, His Tag (PME100349) on Expi293 cells transfected with Human NKG2D protein and Human DAP10 protein (Blue histogram) or Expi293 transfected with irrelevant protein (Red histogram).

