

# Cynomolgus MICA Protein; His Tag

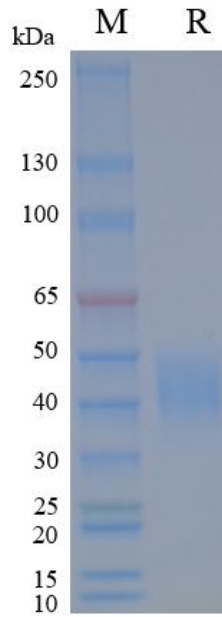
## Product Information

Product Name	Cynomolgus MICA Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$ , stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88379RP-100 / 100 $\mu\text{g}$ GM-88379RP-1000 / 1 mg

## Protein Information

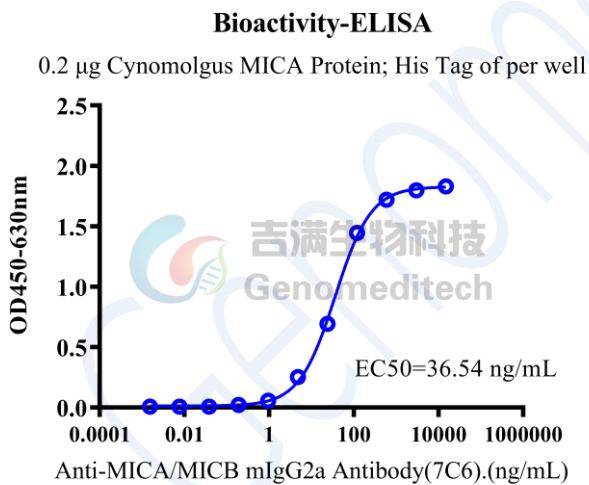
Alternative Names	MIC-A, PERB11.1
Source	Cynomolgus MICA Protein; His Tag (GM-88379RP) is expressed from human 293 cells (HEK-293). It contains Glu 1 - Trp 284 (Accession # AAO24115.1). This protein carries a His tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
Predicted Mol Mass	33.3 KDa
Formulation	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.2-7.4.
Description	MICA (MIC-A, PERB11.1) is a MHC class I-related chain protein encoded by the MICA gene on chromosome 6. It is a stress-induced ligand for the NKG2D receptor on NK cells and some T cells. MICA is upregulated by cellular stress, infection, or transformation; surface MICA can be shed or trafficked intracellularly. MICA-NKG2D binding activates NK cell cytotoxicity and cytokine production, contributing to immune and tumor surveillance. Signaling centers on the NKG2D-DAP10/DAP12 complex, transmitting signals via PI3K-AKT and MAPK pathways. NKG2D engagement triggers NK degranulation, perforin/granzyme release, and target lysis, and can modulate T cell responses and dendritic cell cross-talk. Dysregulated MICA expression or shedding is linked to cancer, viral infections, and autoimmunity, making MICA a target for immunotherapy and biomarkers.

## SDS-PAGE

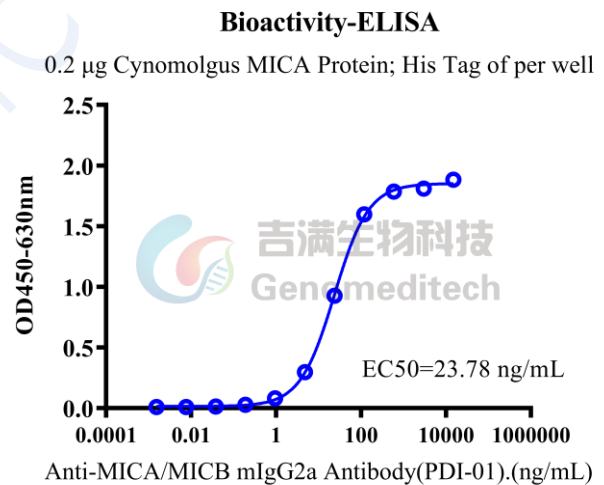


On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## Bioactivity-ELISA



Cynomolgus MICA Protein; His Tag (Catalog # GM-88379RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-MICA/MICB mIgG2a Antibody(7C6) (Catalog # GM-51336AB) were added.



Cynomolgus MICA Protein; His Tag (Catalog # GM-88379RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-MICA/MICB mIgG2a Antibody(PDI-01) (Catalog # GM-52540AB) were added.