

# Human NKG2D Protein; His Tag

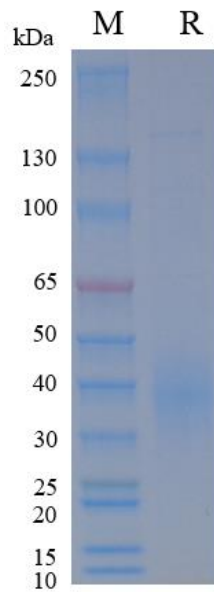
## Product Information

Product Name	Human NKG2D 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-88380RP-100 / 100 $\mu\text{g}$ GM-88380RP-1000 / 1 mg

## Protein Information

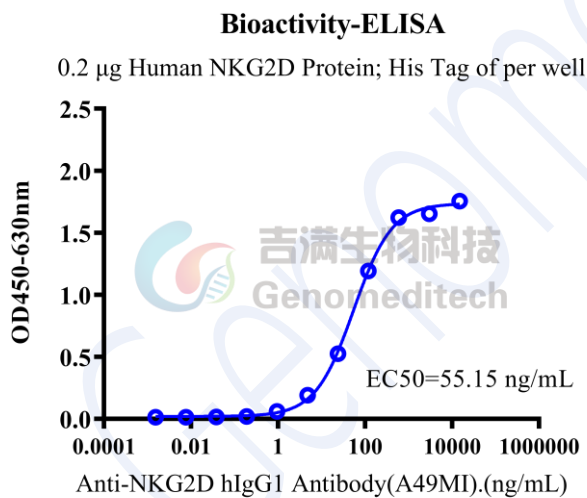
Alternative Names	NKG2D, CD314, KLRK1, NK cell receptor D
Source	Human NKG2D Protein; His Tag (GM-88380RP) is expressed from human 293 cells (HEK-293). It contains Ile 73 - Val 216 (Accession # P26718-1). This protein carries a His tag at the N-terminus.
Purity	> 90% as determined by SDS-PAGE
Endotoxin	< 1 EU/ $\mu\text{g}$ , determined by LAL gel clotting assay
Predicted Mol Mass	17.5 KDa
Formulation	Supplied as a 0.2 $\mu\text{m}$ filtered solution of PBS, pH7.2-7.4.
Description	<p>NKG2D (CD314, KLRK1, NK cell receptor D) is an activating receptor expressed on NK cells and some T cell subsets. It recognizes stress-induced ligands such as MICA/B and ULBPs, which are upregulated on infected, transformed, or stressed cells. Upon ligand binding, NKG2D promotes NK cell cytotoxicity and cytokine production via adaptor proteins like DAP10 (and DAP12 in some contexts), biasing signaling toward activation.</p> <p>The NKG2D signaling pathway centers on its association with DAP10, which recruits PI3K and other kinases to trigger PI3K-AKT and MAPK cascades. This drives NK cell degranulation and perforin/granzyme release, leading to target cell lysis. NKG2D signaling also modulates T cell responses and dendritic cell communication, shaping adaptive immunity. Dysregulation of NKG2D or its ligands is linked to cancer, infections, and autoimmunity, making NKG2D a target for immunotherapy and immune monitoring.</p>

## 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 90%.

## Bioactivity-ELISA



Human NKG2D Protein; His Tag (Catalog # GM-88380RP) was immobilized at 2 µg/ml (100 µL/well). Increasing concentrations of Anti-NKG2D hIgG1 Antibody(A49MI) (Catalog # GM-52535AB) were added.