

PRODUCT INFORMATION

Target	NKG2D
Synonyms	NKG2D;CD314;KLRK1;NK cell receptor D
Description	Recombinant human NKG2D protein with N-terminal mouse Fc
Delivery	In Stock
Uniprot ID	P26718
Expression Host	HEK293
Tag	N-Mouse Fc tag
Molecular Characterization	mFc(Pro99-Lys330) NKG2D(Ile73-Val216)
Molecular Weight	The protein has a predicted molecular mass of 42.8 kDa after removal of the signal peptide. The apparent molecular mass of mFc-NKG2D is approximately 50-65 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	Natural killer (NK) cells are lymphocytes that can mediate lysis of certain tumor cells and virus-infected cells without previous activation. They can also regulate specific humoral and cell-mediated immunity. NK cells preferentially express several calcium-dependent (C-type) lectins, which have been implicated in the regulation of NK cell function. The NKG2 gene family is located within the NK complex, a region that contains several C-type lectin genes preferentially expressed in NK cells. This gene encodes a member of the NKG2 family. The encoded transmembrane protein is characterized by a type II membrane orientation (has an extracellular C terminus) and the presence of a C-type lectin domain. It binds to a diverse family of ligands that include MHC class I chain-related A and B proteins and UL-16 binding proteins, where ligand-receptor interactions can result in the activation of NK and T cells. The surface expression of these ligands is important for the recognition of stressed cells by the immune system, and thus this protein and its ligands are therapeutic targets for the treatment of immune diseases and cancers. Read-through transcription exists between this gene and the upstream KLRC4 (killer cell lectin-like receptor subfamily C, member 4) family member in the same cluster.
Usage	Research use only
Conjugate	Unconjugated



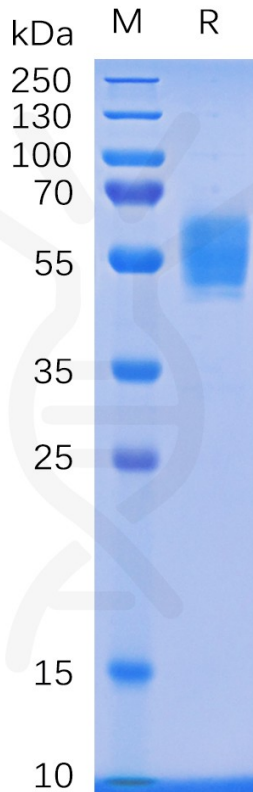


Figure 1. Human NKG2D Protein, mFc Tag on SDS-PAGE under reducing condition.

Human NKG2D, mFc Tagged protein ELISA

0.2 μg of MICA, His Tagged protein per well

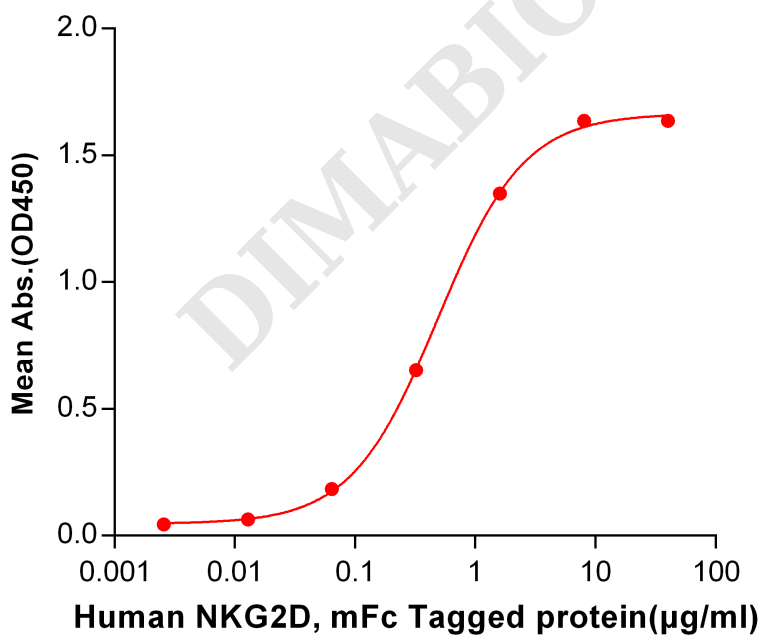


Figure 2. ELISA plate pre-coated by 2 $\mu\text{g/ml}$ (100 $\mu\text{l/well}$) Human MICA, His tagged protein ([getskuurl sku="PME100349"]) can bind Human NKG2D, mFc tagged protein (PME100079) in a linear range of 0.064-1.6 $\mu\text{g/ml}$.



Human NKG2D, mFc Tagged protein ELISA

0.2 μ g of Human NKG2D, mFc Tagged protein per well

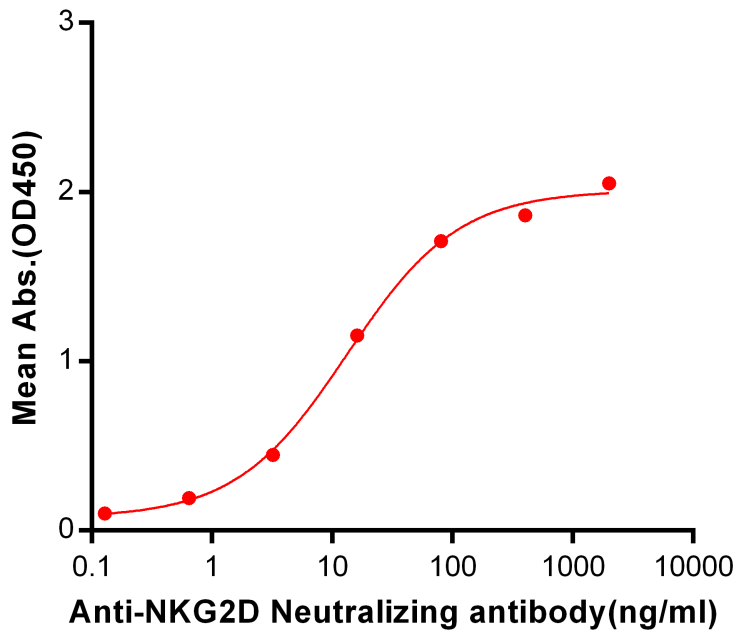


Figure 3. ELISA plate pre-coated by 2 μ g/ml (100 μ l/well) Human NKG2D, mFc tagged protein (PME100079) can bind Anti-NKG2D Neutralizing antibody ([getskuurl sku="BME100039"])

Human NKG2D, mFc Tagged protein ELISA

0.2 μ g of Human NKG2D, mFc tagged protein per well

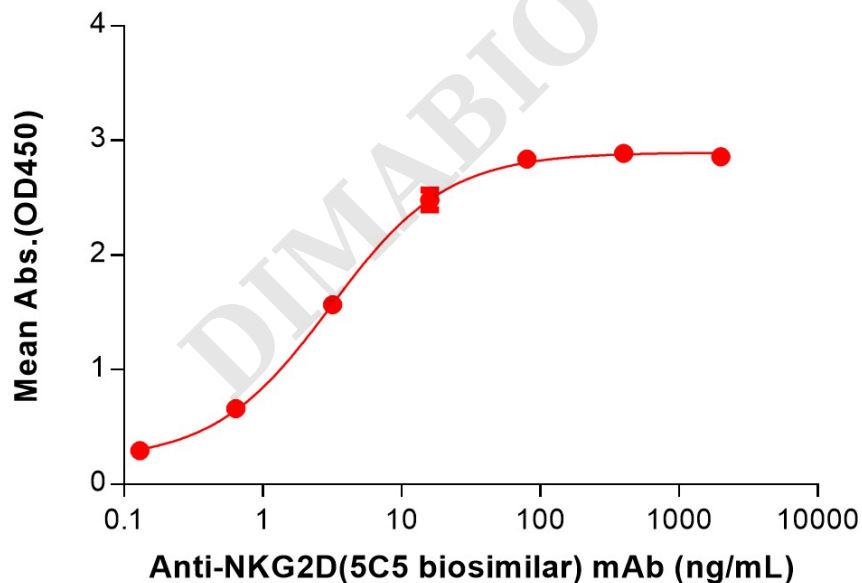


Figure 4. ELISA plate pre-coated by 2 μ g/mL (100 μ l/well) Human NKG2D Protein, mFc Tag (PME100079) can bind Anti-NKG2D(5C5 biosimilar) mAb (BME100207) in a linear range of 0.13–16 ng/mL.

