

Synonym

NKG2D,CD314,KLRK1,NK cell receptor D

SourceHuman NKG2D, Llama IgG2b Fc Tag(NKD-H5257) is expressed from human 293 cells (HEK293). It contains AA Ile 73 - Val 216 (Accession # [P26718-1](#)).

Predicted N-terminus: Glu

Molecular Characterization

| | |
|--|-------------------------------------|
| LlamaFc(Glu 1 - Ser 243) AAX73259.1 | NKG2D(Ile 73 - Val 216) P26718-1 |
|--|-------------------------------------|

This protein carries a llama IgG2b Fc tag at the N-terminus

The protein has a calculated MW of 44.5 kDa. The protein migrates as 55-60 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

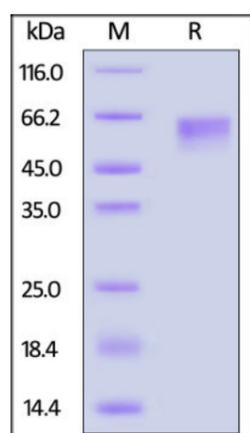
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.***Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

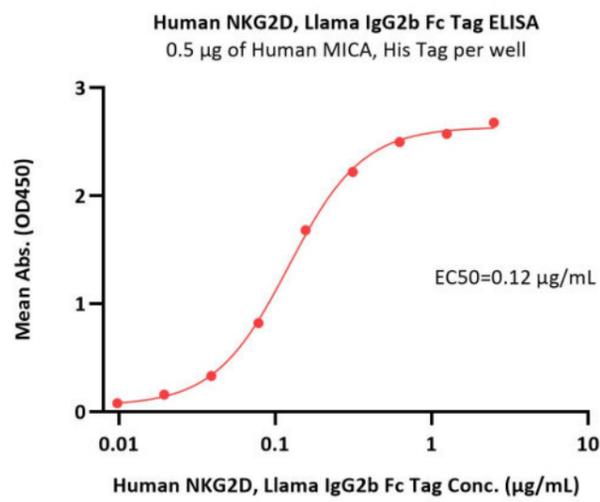
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human NKG2D, Llama IgG2b Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human MICA, His Tag (Cat. No. MIA-H5221) at 5 µg/mL (100 µL/well) can bind Human NKG2D, Llama IgG2b Fc Tag (Cat. No. NKD-H5257) with a linear range of 0.01-0.625 µg/mL (QC tested).

Background

NKG2D is a transmembrane protein belonging to the CD94/NKG2 family of C-type lectin-like receptors, also known as KLRK1, CD314, D12S2489E, KLR and killer cell lectin like receptor K1. NKG2D itself forms a homodimer whose ectodomains serve for ligand binding. NKG2D is a major recognition receptor for the detection and elimination of transformed and infected cells as its ligands are induced during cellular stress, either as a result of infection or genomic stress such as in cancer. In NK cells, NKG2D serves as an activating receptor, which itself is able to trigger cytotoxicity. The function of NKG2D on CD8⁺ T cells is to send co-stimulatory signals to activate them.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.