Data Sheet (Cat.No.TMPK-00090)

TargetMol

NKp30/NCR3 Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	NKp30;1C7;MALS;CD337;LY117;NCR3
Protein Construction:	Leu19-Thr138
Species:	Human
Expression Host:	HEK293 Cells
Accession:	O14931-1
Molecular Weight:	20 kDa (predicted). Due to glycosylation, the protein migrates to 26-40 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	1. Immobilized Human NKp30, His Tag at 0.5μg/ml (100μl/well) on the plate. Dose response curve for Anti-NKp30 Antibody, hFc Tag with the EC50 of 2.4ng/ml determined by ELISA (QC Test). 2. Human B7-H6, hFc Tag captured on CM5 Chip via Protein A can bind Human NKp30, His Tag with an affinity constant of 0.292 μM as determined in SPR assay.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

NKp30, along with NKp44 and NKp46, constitute a group of receptors termed "Natural Cytotoxicity Receptors". These receptors play a major role in triggering NK-mediated killing of most tumor cells lines.NKp30 stimulates NK

cells cytotoxicity toward neighboring cells producing these ligands. It controls, for instance, NK cells cytotoxicity against tumor cells. Engagement of NCR3 by BAG6 also promotes myeloid dendritic cells (DC) maturation, both through killing DCs that did not acquire a mature phenotype, and inducing the release by NK cells of TNFA and IFNG which promote DC maturation.

Reference

Strandmann E P V, et al. NKp30 and its ligands: Emerging players in tumor immune evasion from natural killer cells[J]. Annals of Translational Medicine, 2015.