9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

NKp46 Human

Natural Cytotoxicity Receptor NKp46 Human Recombinant
RCP1500

Product Overview

Name	NKp46 Human
Description	
Natural Cytotoxicity Receptor NKp46 Human Recombinant	
Accession (Primary)	O76036
Synonyms	
Natural cytotoxicity triggering receptor 1, Natural killer cell p46-related protein, hNKp46, NK-p46, NKp46, NK cell-activating receptor, Lymphocyte antigen 94 homolog, CD335 antigen, NCR1, LY94, NCRNKp46, CD335.	
Introduction	
A natural cytotoxicity receptor (NCR) NKp46 has been shown to represent a novel NK cell-specific molecule involved in human NK cell activation. The natural cytotoxicity receptors (NCRs) are a recently characterized family of Ig-like activation receptors that appear to be major triggering receptors in tumor cell recognition. The three known NCRs include NKp46 and NKp30, which are expressed on circulating NKcells, and NKp44, which is expressed only on activating NK cells. NKp46 has been implicated in NK cell-mediated lysis of several autologous tumor cells, pathogen-infected cell lines and mononuclear phagocytes infected with an intracellular bacterium. The Lysis of tumor cells by NK-cells involves recognition by NKp46 of heparan sulfate moieties of membrane heparan sulfate proteoglycans. Furthermore, NKp46 is a surface receptor involved in NK-cell cell death by apoptosis. NKp46 has two extracellular Ig-like domains followed by a ~40 residue stalk region, a type I transmembrane domain, and a short cytoplasmic tail. The extracellular Ig-like domain of NKp46 (22-255aa) is purified by FPLC gel-filtration chromatography, after refolding of the isolated inclusion bodies in a redox buffer. In addition, engagement of the antigen with the monoclonal antibody stimulates intracellular calcium levels and the synthesis of cytokines. CD59 is an NKp46 coreceptor (by physical association) together they activate cytotoxicity of human NK-cells, their engagement results in tyrosine phosphorylation of CD3-zeta chains associated with NKp46. Reduced cell surface expression of NKp46 and other NK-cell receptors is linked to the impaired NK-cell cytolytic function in viremic HIV-1 infection.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile filtered colorless solution.	
Formulation	

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NKp46 (1mg/ml) contains phosphate buffered saline (pH7.4) & 1mM EDTA.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence

MQQQTLPKPF IWAEPHFMVP KEKQVTICCQ GNYGAVEYQL HFEGSLFAVD RPKPPERINKVKFYIPDMNS RMAGQYSCIY RVGELWSEPS NLLDLVVTEM YDTPTLSVHP GPEVISGEEV TFYCRLDTAT SMFLLLKEGR SSHVQRGYGK VQAEFPLGPV TTAHRGTYRX FGSYNNHAWSFPSEPVKLLV TGDIENTSLA PEDPTFSADT WGTYLLTTET GLQKDHALWD HTAQN.

Precautions

NKp46 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (O76036)