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# Recombinant Mouse NKG2-D type II Integral Membrane Protein/NKG2D/CD314 (N-6His)

Catalog Number: PKSM041409

Note: Centrifuge before opening to ensure complete recovery of vial contents.

## Description

**Species** Mouse

Source HEK293 Cells-derived Mouse NKG2D/CD314 protein Phe94-Val232, with an N-terminal

His

Calculated MW 16.7 kDa
Observed MW 20-30 kDa
Accession O54709

**Bio-activity** Not validated for activity

#### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

Endotoxin < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation** Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.

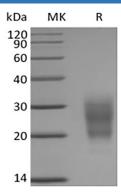
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

#### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

# Elabscience®

#### Elabscience Bionovation Inc.

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NKG2-D type II integral membrane protein (NKG2D) is a type II transmembrane glycoprotein which belongs to the CD94/NKG2 family. NKG2D is expressed on natural killer (NK) cells, CD8+ alpha-beta and gamma-delta T-cells. As an activating and costimulatory receptor, it involved in immunosurveillance upon binding to various cellular stress-inducible ligands displayed at the surface of autologous tumor cells and virus-infected cells. It provides both stimulatory and costimulatory innate immune responses on activated killer (NK) cells, leading to cytotoxic activity. It stimulates perforin-mediated elimination of ligand-expressing tumor cells. Signaling involves calcium influx, culminating in the expression of TNF-alpha. NKG2D participates in NK cell-mediated bone marrow graft rejection and survival of NK cells. It Binds to ligands belonging to various subfamilies of MHC class I-related glycoproteins including MICA, MICB, RAET1E, RAET1G, ULBP1, ULBP2, ULBP3 (ULBP2>ULBP1>ULBP3) and ULBP4.

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