MOUSE NKG2D PROTEIN, HFC TAG

Cat.#: 12194

Product Name: Mouse NKG2D Protein

Size : 10 μg, 50 μg and 100 μg

Synonyms: NK cell receptor D;CD314;Klrk1;Nkg2d

Target: NKG2D

UNIPROT ID: O54709

Description: Recombinant mouse NKG2D protein with N-terminal human Fc tag

Background: Function as an activating and costimulatory receptor involved in immunosurveillance upon binding to various cellular stress-inducible ligands displayed at the surface of autologous tumor cells and virus-infected cells. Provides both stimulatory and costimulatory innate immune responses on activated killer (NK) cells, leading to cytotoxic activity. Acts as a costimulatory receptor for T-cell receptor (TCR) in CD8( ) T-cell-mediated adaptive immune responses by amplifying T-cell activation. Stimulates perforin-mediated elimination of ligand-expressing tumor cells. Signaling involves calcium influx, culminating in the expression of TNF-alpha. Participates in NK cell-mediated bone marrow graft rejection. May play a regulatory role in differentiation and survival of NK cells. Binds to ligands belonging to various subfamilies of MHC class I-related glycoproteins including RAET1A, RAET1B, RAET1C, RAET1D, RAET1E, H60 and MULT1.[UniProtKB/Swiss-Prot Function]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 42.6 kDa after removal of the signal peptide. The apparent molecular mass of hFc-mNKG2D is approximately 35-55 kDa due to glycosylation.

Molecular Characterization: hFc(Glu99-Ala330) Mouse NKG2D(Phe90-Val232)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

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.

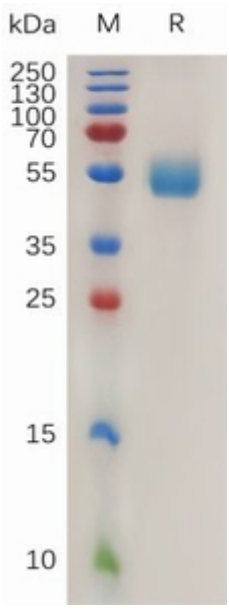

Figure 1. Mouse NKG2D Protein, hFc Tag on SDS-PAGE under reducing condition.