Product Datasheet

Sales Enquires: sales@absoluteantibody.com
Support Queries: support@absoluteantibody.com
Tel: +44 (0) 1865 920810
Fax: +44 (0) 1865 920811
absoluteantibody.com

Recombinant Human NKG2D Fc-Fusion Protein

Cat No: Pr00125-10.28

Product Summary

Description: Recombinant human NKG2D Fc-Fusion Protein manufactured using AbAb's Recombinant Platform

Protein: Human NKG2D

Fc domain: Human IgG1

Structure / Form: Disulfide-linked homodimer

Species: Human

Construct Design Note(s): The extracellular domain of NKG2D has been fused to the Fc domain of human IgG1.

Host: HEK293

UniProt Accession Number: P26718

Alternative Description: NKG2-D type II integral membrane protein, Killer cell lectin-like receptor subfamily K member 1, NK cell receptor D, NKG2-D-activating NK receptor, CD314; NKG2D-Ig; NKG2D-Fc chimera; NKG2D (Fc tag)

Published Application(s):

Tested Applications(s):

Activity: 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 MICA, MICB, RAET1E, RAET1G, RAET1L/ULBP6, ULBP1, ULBP2, ULBP3 (ULBP2>ULBP1>ULBP3) and ULBP4 [Uniprot].

Product Form

Purification: IMAC purified

Supplied in: 0.1 mg size: PBS with preservative (0.02% Proclin 300), 1 mg size: PBS only.

Endotoxin: <1.0 EU/mg

Shipping: The product is shipped on blue ice. Upon receipt, store it immediately at the temperature recommended.

Storage Recommendation: Store at 4°C for up to 1 month. For longer term storage aliquot in small volumes and store at -20°C. Avoid repeated freeze-thaw cycles.

SDS PAGE Purity: >95%, as determined by SDS-PAGE and visualized by Coomassie Brilliant Blue.

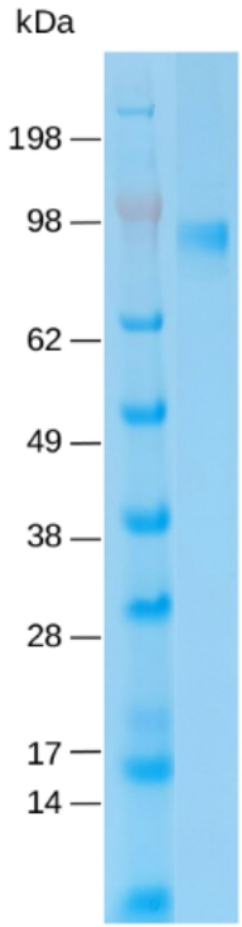
Fc-Fusion Sequence (monomer)

HHHHHHEPKSQDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHN
AKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSL
TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLS
LSPG**GGGGSGGGGS**SAVFLNSLFNQEVQIPLTESYCGPCPKNWICYKNNCYQFFDESKNWYESQASCMSQNASLLK
VYSKEDQDLLKLVKSYHWMGLVHIPTNGSWQWEDGSILSPNLLTIIEMQKGDCALYASSFKGYIENCSTPNTYICMQRT
V

Underlined amino acids sequence include a G4S linker and 6xHis epitope tag, respectively.

Calculated Molecular weight (dimer): 87559 Da

Extinction coefficient: 154740 (calculation performed as described by Pace *et al.* (1995), PMID: 8563639).



NKG2D (Pr00125-10.28) SDS-PAGE. Pr00125-10.28 under non-reducing conditions resolved by SDS-PAGE and stained using Coomassie-Blue.