

Anti-NKG2D [16F16] Bulk Size Ab03076-13.0-BT

Isotype and Format: Human IgG4, Kappa

Clone Number: 16F16

Alternative Name(s) of Target: KLRK1; CD314; NKG2-D type II integral membrane protein; NK cell receptor D; Killer cell lectin-like receptor subfamily K member 1; NKG2-D-activating NK receptor; KYK2; KYK-2.0

UniProt Accession Number of Target Protein: P26718

Published Application(s): ELISA, FC

Published Species Reactivity: cynomolgous monkey, Human, Rhesus Monkey

Immunogen: The original antibody was generated by immunizing KM Mouse™ strain of transgenic mice that express human antibody genes with alternating intraperitoneal injection of NKG2D-transfected BAF cells and NKG2D-transfected CHO cells, or primary human NK cells. The second round of immunizations were done using NKG2D-hFc as an immunogen.

Specificity: This antibody recognizes human, cynomolgous monkey and rhesus monkey NKG2D, but does not cross react with mouse rat, dog or pig NKG2D. Natural killer (NK) cells serve as key innate effectors and their activity has been considered a prognostic biomarker in diverse human diseases. NKG2d functions 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. It provides both stimulatory and costimulatory innate immune responses on activated killer (NK) cells, leading to cytotoxic activity. It also acts as a costimulatory receptor for T-cell receptor (TCR) in CD8+ T-cell-mediated adaptive immune responses by amplifying T-cell activation. and participates in NK cell-mediated bone marrow graft rejection.

Application Notes: The primary screening of this antibody for binding NKG2D was done using ELISA. This antibody was successful in staining and identification NKG2D expressed on PBMCs isolated from human, cynomolgous monkey and rhesus monkey in a flow cytometric assay. The original human IgG4 version of this antibody bound NKG2D with an affinity of 0.172nM. This antibody was also capable of blocking binding of NKG2D to MICA and preventing killing of MICA-bearing cells by NK cells in a dose-dependent fashion. This antibody also inhibited killing of both MICA- and ULBP-bearing BaF/3 target cells by NK-92 cells in a dose dependent manner (US7879985).

Antibody First Published in: [PMID:](#)

Note on publication:

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.