

## Anti-NKG2D [CX-5] VivopureX 1 mg Ab02365-2.0-VXS

This chimeric mouse antibody was made using the variable domain sequences of the original rat IgG1 format for improved compatibility with existing reagents assays and techniques.

**Isotype and Format:** Mouse IgG2a, Lambda

**Clone Number:** CX-5

**Alternative Name(s) of Target:** CD314; KLRK1; 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; CX5

**UniProt Accession Number of Target Protein:** O54709

**Published Application(s):** FC, blocking, neutralizing

**Published Species Reactivity:** Mouse

**Immunogen:** The original rat IgG1 version of this antibody was raised by immunizing rats against mouse KLRK1.

**Specificity:** This antibody recognizes mouse NKG2D, a lectin-like molecule expressed on both human and mouse NK cells. Mouse NKG2D binds to retinoic acid-inducible RAE-1 alpha, beta, gamma, delta, epsilon and the minor histocompatibility molecule H60 and has the ability to costimulate multiple NK activation receptors, through the DAP12/DAP10 adaptor molecules. NKG2D is expressed by all spleen and liver NK cells, NK1.1 thymocytes, in vitro activated LAK cells, and a subset of splenic NKT cells.

**Application Notes:** It has been shown that CX5 is a non-depleting antibody, which blocks binding of NKG2D to its ligands and mediates internalization of the receptor. This antibody has been widely used to block NKG2D (Wang et al., 2018; pmid: 29447423; Yang et al., 2017; pmid: 28455530) as well as to detect NKG2D-positive cells via flow cytometry (Hosomi et al., 2017; pmid: 28747426).

**Antibody First Published in:** Ogasawara et al. Impairment of NK cell function by NKG2D modulation in NOD mice Immunity. 2003 Jan;18(1):41-51. doi: 10.1016/s1074-7613(02)00505-8. [PMID:12530974](#)

**Note on publication:** Describes the characterization of this antibody.

## Product Form

**Size:** 1 mg VivopureX products are produced at high purity (>98%), low endotoxin (<0.5 EU/mg) and are formulated without preservatives. These antibodies are chimerized to have an Fc domain matching their target species to reduce immunogenicity and give you the optimal effector function for your experiment. As a result VivopureX products are the ideal choice for in vivo research applications.

**Purification:**

Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** All VivopureX products are formulated in PBS only without addition of preservatives. To ensure optimal storage and prevent microbial contamination, only open and dispense under sterile conditions. Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:**  $\geq 1$ mg (see vial label for exact conc)

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