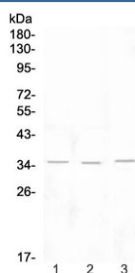


NKG2D Antibody (RQ4042)

Catalog No.	Formulation	Size
RQ4042	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse, Rat
Predicted Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P26718
Applications	Western Blot : 0.5-1ug/ml
Limitations	This NKG2D antibody is available for research use only.



Western blot testing of 1) rat lymph, 2) rat spleen and 3) mouse thymus tissue lysate with NKG2D antibody at 0.5ug/ml. Predicted molecular weight ~25 kDa (unmodified), ~35 kDa (glycosylated).

Description

NKG2D is encoded by KLRK1 gene which is located in the NK-gene complex (NKC) situated on chromosome 12 in humans. Natural killer (NK) cells are lymphocytes that can mediate lysis of certain tumor cells and virus-infected cells without previous activation. They can also regulate specific humoral and cell-mediated immunity. NK cells preferentially express several calcium-dependent (C-type) lectins, which have been implicated in the regulation of NK cell function. The NKG2 gene family is located within the NK complex, a region that contains several C-type lectin genes preferentially expressed in NK cells. This gene encodes a member of the NKG2 family. The encoded transmembrane protein is characterized by a type II membrane orientation (has an extracellular C terminus) and the presence of a C-type lectin

domain. It binds to a diverse family of ligands that include MHC class I chain-related A and B proteins and UL-16 binding proteins, where ligand-receptor interactions can result in the activation of NK and T cells. The surface expression of these ligands is important for the recognition of stressed cells by the immune system, and thus this protein and its ligands are therapeutic targets for the treatment of immune diseases and cancers. Read-through transcription exists between this gene and the upstream KLRC4 (killer cell lectin-like receptor subfamily C, member 4) family member in the same cluster.

Application Notes

Optimal dilution of the NKG2D antibody should be determined by the researcher.

Immunogen

Amino acids YQFFDESKNWYESQASCMSQNASLLKVYSKEDQDLLKLVKSYH from the human protein were used as the immunogen for the NKG2D antibody.

Storage

After reconstitution, the NKG2D antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.