



# CD314 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-13895
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	KLRK1
<b>Protein Name</b>	NKG2-D type II integral membrane protein
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human KLRK1. AA range:111-160
<b>Specificity</b>	CD314 Polyclonal Antibody detects endogenous levels of CD314 protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	KLRK1; D12S2489E; NKG2D; 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; CD antigen CD314
<b>Observed Band</b>	25kD
<b>Cell Pathway</b>	Cell membrane ; Single-pass type II membrane protein . Colocalized with HCST on the cell surface.
<b>Tissue Specificity</b>	Expressed in natural killer (NK) cells, CD8(+) alpha-beta and gamma-delta T-cells. Expressed on essentially all CD56+CD3- NK cells from freshly isolated PBMC. Expressed in interferon-producing killer dendritic cells (IKDCs).
<b>Function</b>	alternative products:A number of isoforms are produced,function:Receptor for MICA, MICB, ULBP1, ULBP2, ULBP3 (ULBP2>ULBP1>ULBP3) and ULBP4. Plays a role as a receptor for the recognition of MHC class I HLA-E molecules by NK cells and some cytotoxic T-cells. Involved in the immune surveillance exerted by T- and B-lymphocytes.,miscellaneous:Structurally distinct families of ligands for mouse and human NKG2D receptors have been characterized. They might be orthologs.,online information:NKG-2D,similarity:Contains 1 C-type lectin domain.,subunit:Homodimer. Interacts with DAP10. The interaction with DAP10 is required for NKG2D cell surface expression.,tissue specificity:Natural killer cells. Expressed on essentially all CD56+CD3- NK cells from freshly isolated PBMC. Also detected in gamma-delta cells and CD8+ alpha-beta T-cells. Expressed in



interferon-producing killer dendritic cells (IKDCs).

## Background

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

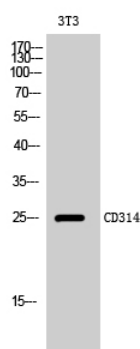
## matters needing attention

Avoid repeated freezing and thawing!

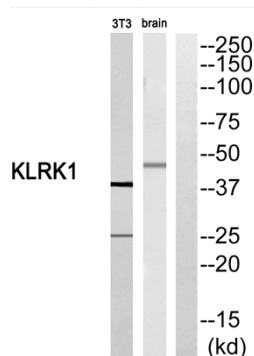
## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of 3T3 cells using CD314 Polyclonal Antibody



Western blot analysis of KLRK1 Antibody. The lane on the right is blocked with the KLRK1 peptide.