

CD314 Polyclonal Antibody

Catalog # AP68936

Product Information

Application	WB
Primary Accession	<u>P26718</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25304

Additional Information

Gene ID	22914
Other Names	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
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	KLRK1
Synonyms	D12S2489E, NKG2D
Function	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. 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.

Cellular Location	Cell membrane; Single-pass type II membrane protein Note=Colocalized with HCST on the cell surface
Tissue Location	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).

Background

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.

Images



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