ARG59385
anti-CD314 / NKG2D antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD314 / NKG2D
Tested Reactivity	Hu, Ms
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD314 / NKG2D
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 77-216 of Human CD314 / NKG2D (NP_031386.2).
Conjugation	Un-conjugated
Alternate Names	LR; CD314; NKG2D; NKG2-D; D12S2489E

Application Instructions

Predict Reactivity Note	Mouse

Application table

Application	Dilution
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HepG2

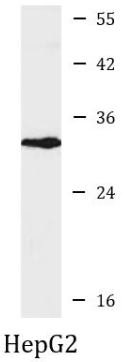
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	KLRK1
Gene Full Name	killer cell lectin like receptor K1
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 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. [provided by RefSeq, Dec 2010]
Function	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. [UniProt]
Calculated Mw	25 kDa
Cellular Localization	Cell membrane; Single-pass type II membrane protein. Note=Colocalized with HCST on the cell surface. [UniProt]

Images



ARG59385 anti-CD314 / NKG2D antibody WB image

Western blot: 25 µg of HepG2 cell lysate stained with ARG59385 anti-CD314 / NKG2D antibody at 1:1000 dilution.