

Datasheet for ABIN1027688
anti-KLRK1 antibody (FITC)[Go to Product page](#)

4 Images

7 Publications

Overview

Quantity:	100 tests
Target:	KLRK1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This KLRK1 antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	NKL cell line
Clone:	1D11
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody 1D11 recognizes an extracellular epitope of CD314 / NKG2D, a 42 kDa C-type lectin-like activating receptor expressed by NK cells, gamma/delta T cells, and CD8+ T cells.
Cross-Reactivity (Details):	Human
Purification:	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	KLRK1
Alternative Name:	CD314 (KLRK1 Products)
Background:	Killer cell lectin like receptor K1,CD314, also known as NKG2D (natural killer receptor G2D) or KLRK1 (killer cell lectin-like receptor subfamily K, member 1), is a homodimeric C-type lectin-like activating receptor and costimulator with type II membrane orientation (C terminus extracellular). CD314 homodimers are associated with DAP10, a membrane adaptor protein that signals similar to CD28 by recruitment of phosphatidylinositol 3-kinase. Engagement of CD314 amplifies antigen-specific T cell responses in CD314-positive T cell populations. In NK cells, CD314 is a primary activating receptor. As CD314 ligands the MHC class-I chain-related proteins A and B (MICA, MICB) and UL16-binding proteins (ULBPs) have been identified.,NKG2D, KLRK1, KLR
Gene ID:	22914
UniProt:	P26718
Pathways:	Activation of Innate immune Response , Cellular Response to Molecule of Bacterial Origin , Regulation of Leukocyte Mediated Immunity , Positive Regulation of Immune Effector Process

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µL reagent / 100 µL of whole blood or 10 ⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

Handling

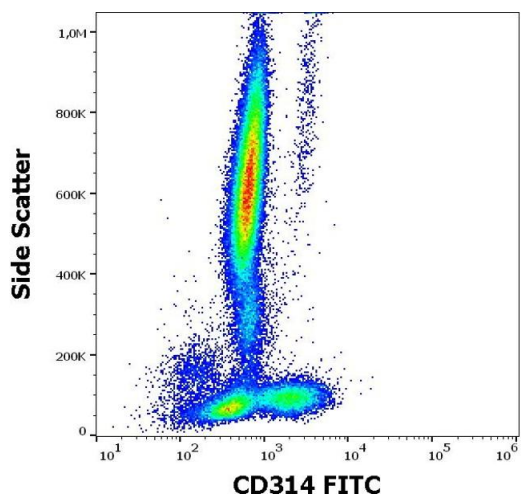
Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Handling Advice:	Do not freeze. Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

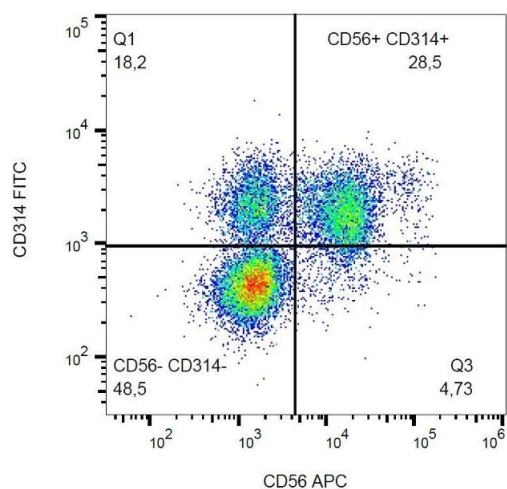
Publications

Product cited in:	<p>Valencia, Hernández-López, Martínez, Hidalgo, Zapata, Vicente, Varas, Sacedón: "Transient beta-catenin stabilization modifies lineage output from human thymic CD34+CD1a- progenitors." in: Journal of leukocyte biology, Vol. 87, Issue 3, pp. 405-14, (2010) (PubMed).</p> <p>Hasenkamp, Borgerding, Uhrberg, Falk, Chapuy, Wulf, Jung, Trümper, Glass: "Self-tolerance of human natural killer cells lacking self-HLA-specific inhibitory receptors." in: Scandinavian journal of immunology, Vol. 67, Issue 3, pp. 218-29, (2008) (PubMed).</p> <p>Sangiolo, Martinuzzi, Todorovic, Vitaggio, Vallario, Jordaney, Carnevale-Schianca, Capaldi, Geuna, Casorzo, Nash, Aglietta, Cignetti: "Alloreactivity and anti-tumor activity segregate within two distinct subsets of cytokine-induced killer (CIK) cells: implications for their infusion across major HLA barriers." in: International immunology, Vol. 20, Issue 7, pp. 841-8, (2008) (PubMed).</p> <p>Ebert, Meuter, Moser: "Homing and function of human skin gammadelta T cells and NK cells: relevance for tumor surveillance." in: Journal of immunology (Baltimore, Md. : 1950), Vol. 176, Issue 7, pp. 4331-6, (2006) (PubMed).</p> <p>Wu, Groh, Spies: "T cell antigen receptor engagement and specificity in the recognition of stress-inducible MHC class I-related chains by human epithelial gamma delta T cells." in: Journal of immunology (Baltimore, Md. : 1950), Vol. 169, Issue 3, pp. 1236-40, (2002) (PubMed).</p> <p>There are more publications referencing this product on: Product page</p>
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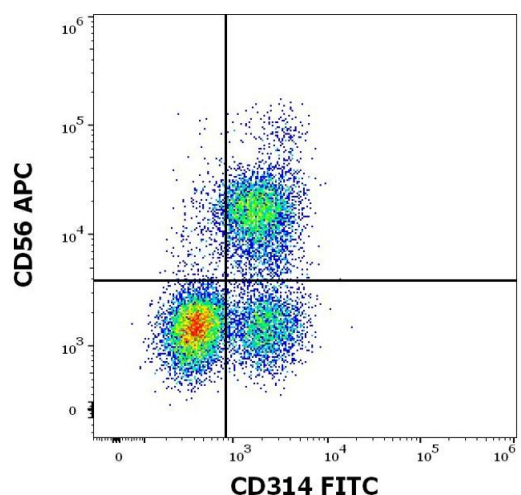
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD314 (1D11) FITC antibody (4 μ L reagent / 100 μ L of peripheral whole blood).



Flow Cytometry

Image 2. Surface staining of human peripheral blood with anti-human CD314 (1D11) FITC.



Flow Cytometry

Image 3. Flow cytometry multicolor surface staining of human lymphocytes stained using anti-human CD314 (1D11) FITC antibody (4 μ L reagent / 100 μ L of peripheral whole blood) and anti-human CD56 (LT56) APC antibody (10 μ L reagent / 100 μ L of peripheral whole blood).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN1027688.