

Datasheet for ABIN2749125  
**anti-KLRK1 antibody (PE)**[Go to Product page](#)**1** Image**7** Publications

## Overview

Quantity:	100 tests
Target:	KLRK1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This KLRK1 antibody is conjugated to PE
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 R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

## Target Details

Target:	KLRK1
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## Target Details

Alternative Name:	CD314 ( <a href="#">KLRK1 Products</a> )
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:	<a href="#">P26718</a>
Pathways:	<a href="#">Activation of Innate immune Response</a> , <a href="#">Cellular Response to Molecule of Bacterial Origin</a> , <a href="#">Regulation of Leukocyte Mediated Immunity</a> , <a href="#">Positive Regulation of Immune Effector Process</a>

## Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µL reagent / 100 µL of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

## Handling

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

## Publications

Product cited in:

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](#)).

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](#)).

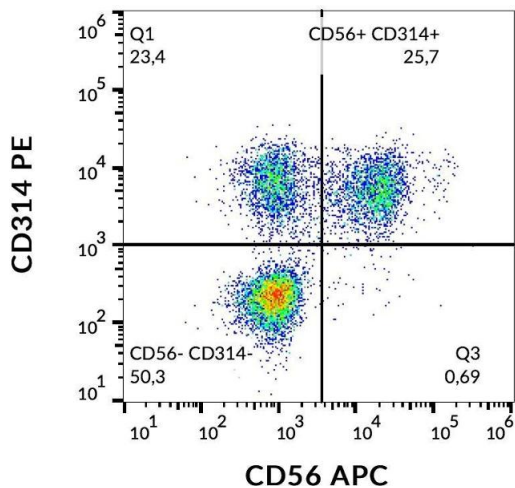
Sangiolo, Martinuzzi, Todorovic, Vitaggio, Vallario, Jordaney, Carnevale-Schianca, Capaldi, Geuna, Casorzo, Nash, Aglietta, Cignetti: "Alloreactivity and anti-tumor activity segregate within two distinct subsets of cytokine-induced killer (CIK) cells: implications for their infusion across major HLA barriers." in: **International immunology**, Vol. 20, Issue 7, pp. 841-8, (2008) ([PubMed](#)).

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](#)).

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](#)).

There are more publications referencing this product on: [Product page](#)

## Images



### Flow Cytometry

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