



Datasheet for ABIN1027686

anti-KLRK1 antibody



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Overview

| | |
|--------------|---|
| Quantity: | 0.1 mg |
| Target: | KLRK1 |
| Reactivity: | Human |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This KLRK1 antibody is un-conjugated |
| Application: | Flow Cytometry (FACS), Immunoprecipitation (IP), Immunohistochemistry (Frozen Sections) (IHC (fro)) |

Product Details

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|-----------------------------|--|
| 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 by protein-A affinity chromatography. |
| Purity: | > 95 % (by SDS-PAGE) |

Target Details

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|-------------------|---|
| 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

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| Application Notes: | Flow cytometry: Recommended dilution: 1-4 µg/mL. |
| Restrictions: | For Research Use only |

Handling

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|--------------------|--|
| Concentration: | 1 mg/mL |
| Buffer: | 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 Advice: | Do not freeze. |
| Storage: | 4 °C |
| Storage Comment: | Store at 2-8°C. 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](#)).

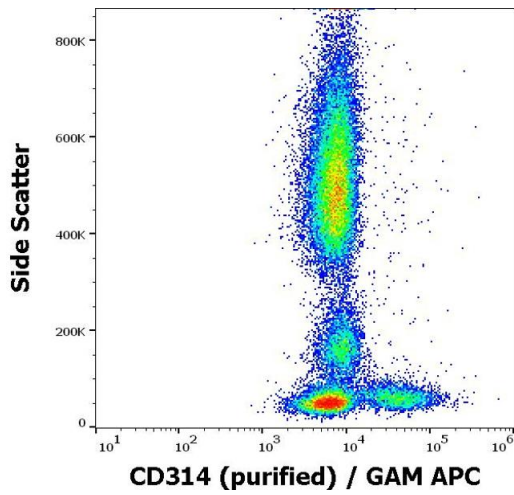
Hasenkamp, Borgerding, Uhrberg, Falk, Chapuy, Wulf, Jung, Trümper, Glass: "Self-tolerance of human natural killer cells lacking self-HLA-specific inhibitory receptors." in: **Scandinavian journal of immunology**, Vol. 67, Issue 3, pp. 218-29, (2008) ([PubMed](#)).

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](#)).

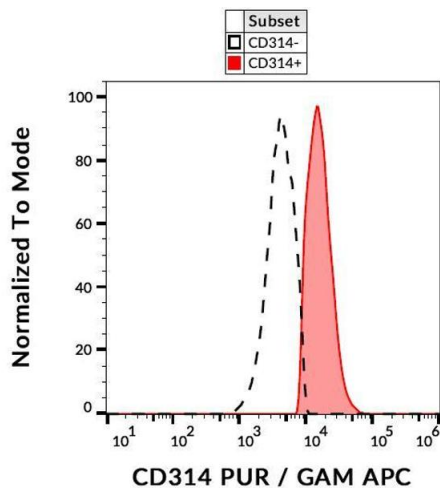
Wu, Groh, Spies: "T cell antigen receptor engagement and specificity in the recognition of stress-inducible MHC class I-related chains by human epithelial gamma delta T cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 169, Issue 3, pp. 1236-40, (2002) ([PubMed](#)).

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



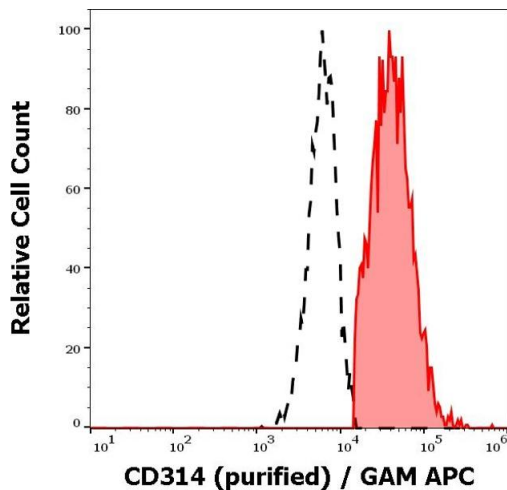
Flow Cytometry

Image 1. Flow cytometry surface staining pattern of human peripheral blood stained using anti-human CD314 (1D11) purified antibody (concentration in sample 4 µg/mL) GAM APC.



Flow Cytometry

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



Flow Cytometry

Image 3. Separation of human CD314 positive lymphocytes (red-filled) from CD314 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD314 (1D11) purified antibody (concentration in sample 4 µg/mL) GAM APC.