

PE/Fire™ 744 anti-human CD159a (NKG2A) Antibody

Catalog# / Size	375157 / 25 tests 375158 / 100 tests
Clone	S19004C
Regulatory Status	RUO
Other Names	Killer Cell Lectin Like Receptor C1, KLRC1, NK Cell Receptor A
Isotype	Mouse IgG1, κ
Description	CD159a, also known as NKG2A or KLRC1, is a type II transmembrane protein. It belongs to the killer cell lectin-like receptor family also known as the NKG2 family. It is expressed on NK and NKT cells and T cell subsets. NKG2A is an inhibitory NK cell receptor and it is expressed as a heterodimer with CD94. In human, NKG2A/CD94 complex interacts HLA-E on target cells and inhibits T cells and NK cell effector functions. Recent studies showed that NKG2A blockade enhances the anti-tumor effect of NK cell and CD8 ⁺ T cells.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human NKG2A/CD94-transfectants
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 744 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. True-Stain Monocyte Blocker™ (Cat No. 426102) is recommended to minimize non-specific staining of PE/Fire™ 744 on monocytes and macrophages. * PE/Fire™ 744 has a maximum excitation of 565 nm and a maximum emission of 744 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Clone S19004C does not cross-react with mouse CD159a.
RRID	AB_3720505 (BioLegend Cat. No. 375157) AB_3720505 (BioLegend Cat. No. 375158)

Antigen Details

Structure	Type II transmembrane proteins of the C-type lectin superfamily
Distribution	NK cells, NKT cells, T cell subsets
Function	Inhibiting NK cell receptor
Ligand/Receptor	HLA-E
Cell Type	Lymphocytes, NK cells, NKT cells, T cells
Biology Area	Immuno-Oncology, Immunology
Molecular Family	Immune Checkpoint Receptors

Antigen References

1. Brooks AG, *et al.* 1999. *J Immunol.* 162:305-13.
2. Kaiser BK, *et al.* 2008. *Proc Natl Acad Sci U S A.* 105: 6696-701.
3. Braud VM, *et al.* 2003. *Trends Immunol.* 24:162-4.
4. Kamiya T, *et al.* 2019. *J Clin Invest.* 129:2094.
5. André P, *et al.* 2018. *Cell.* 175:1731.

Gene ID [3821](#)

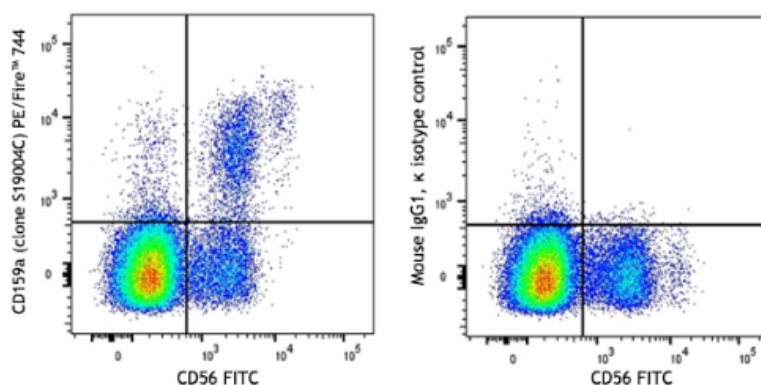
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Alexa Fluor® 488 anti-human CD159a (NKG2A), PerCP/Cyanine5.5 anti-human CD159a (NKG2A), FITC anti-human CD159a (NKG2A), TotalSeq™-C1374 anti-human CD159a (NKG2A), TotalSeq™-D1374 anti-human CD159a (NKG2A), Brilliant Violet 605™ anti-human CD159a (NKG2A), TotalSeq™-B1374 anti-human CD159a (NKG2A), TotalSeq™-A1374 anti-human CD159a (NKG2A), Brilliant Violet 421™ anti-human CD159a (NKG2A), Spark Red™ 718 anti-human CD159a (NKG2A) (Flexi-Fluor™), APC/Fire™ 810 anti-human CD159a (NKG2A), Brilliant Violet 785™ anti-human CD159a (NKG2A), PerCP/Fire™ 806 anti-human CD159a (NKG2A), PerCP/Fire™ 780 anti-human CD159a (NKG2A), PE/Fire™ 810 anti-human CD159a (NKG2A), APC/Cyanine7 anti-human CD159a (NKG2A), Brilliant Violet 650™ anti-human CD159a (NKG2A), PE/Fire™ 744 anti-human CD159a (NKG2A), Brilliant Violet 510™ anti-human CD159a (NKG2A) Antibody, Purified anti-human CD159a (NKG2A), PE anti-human CD159a (NKG2A), Alexa Fluor® 647 anti-human CD159a (NKG2A) Antibody, PE/Cyanine5 anti-human CD159a (NKG2A), Alexa Fluor® 700 anti-human CD159a (NKG2A) Antibody, PE/Dazzle™ 594 anti-human CD159a (NKG2A) Antibody, PE/Cyanine7 anti-human CD159a (NKG2A) Antibody, APC/Fire™ 750 anti-human CD159a (NKG2A), Biotin anti-human CD159a (NKG2A) Antibody, Brilliant Violet 711™ anti-human CD159a (NKG2A), PE/Cyanine7 anti-human CD159a, APC anti-human CD159a (NKG2A) Antibody, Pacific Blue™ anti-human CD159a (NKG2A) Antibody

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD56 (clone QA17A16) FITC and anti-human CD159a (NKG2A) (clone S19004C) PE/Fire™ 744 (left) or mouse IgG1, κ PE/Fire™ 744 isotype control (right).

For Research Use Only. Not for diagnostic or therapeutic use.

This product is supplied subject to the terms and conditions, including the limited license, located at www.biolegend.com/terms ("Terms") and may be used only as provided in the Terms. Without limiting the foregoing, BioLegend products may not be used for any Commercial Purpose as defined in the Terms, resold in any form, used in manufacturing, or reverse engineered, sequenced, or otherwise studied or used to learn its design or composition without express written approval of

BioLegend. Regardless of the information given in this document, user is solely responsible for determining any license requirements necessary for user's intended use and assumes all risk and liability arising from use of the product. BioLegend is not responsible for patent infringement or any other risks or liabilities whatsoever resulting from the use of its products.

BioLegend, the BioLegend logo, and all other trademarks are property of BioLegend, Inc. or their respective owners, and all rights are reserved.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587