

APC anti-human CD159a (NKG2A) Antibody

Catalog# / Size	375107 / 25 tests 375108 / 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 APC 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 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Red Laser (633 nm)
Application Notes	Clone S19004C does not cross-react with mouse CD159a.
Product Citations	<ol style="list-style-type: none"> Gerace D, <i>et al.</i> 2023. Cell Rep Med. 4:100879. PubMed Jo DH, <i>et al.</i> 2023. Mol Ther Methods Clin Dev. 29:173. PubMed Wang H, <i>et al.</i> 2022. Front Immunol. 13:852436. PubMed Guo M, <i>et al.</i> 2021. Front Oncol. 11:632540. PubMed
RRID	AB_2888862 (BioLegend Cat. No. 375107) AB_2888862 (BioLegend Cat. No. 375108)

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](#)

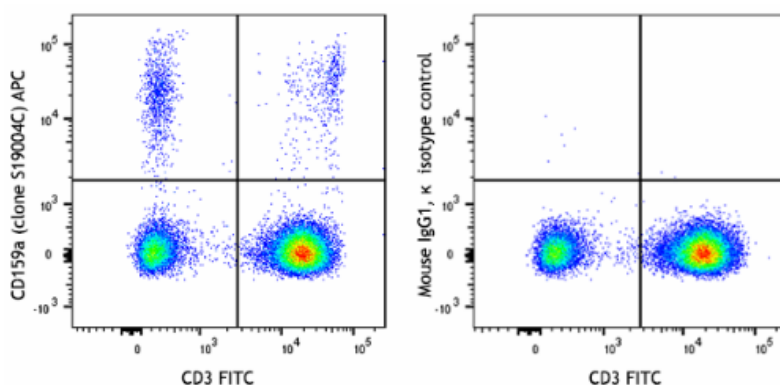
Related Protocols

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

Other Formats

Purified anti-human CD159a (NKG2A), PE anti-human CD159a (NKG2A), APC anti-human CD159a (NKG2A) Antibody, Pacific Blue™ anti-human CD159a (NKG2A) Antibody, PE/Cyanine7 anti-human CD159a (NKG2A) Antibody, Alexa Fluor® 647 anti-human CD159a (NKG2A) Antibody, PE/Cyanine5 anti-human CD159a (NKG2A), APC/Fire™ 750 anti-human CD159a (NKG2A), Alexa Fluor® 700 anti-human CD159a (NKG2A) Antibody, PE/Dazzle™ 594 anti-human CD159a (NKG2A) Antibody, Biotin anti-human CD159a (NKG2A) Antibody, 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), TotalSeq™-A1374 anti-human CD159a (NKG2A), APC/Fire™ 810 anti-human CD159a (NKG2A), Brilliant Violet 421™ anti-human CD159a (NKG2A), Brilliant Violet 605™ anti-human CD159a (NKG2A), Brilliant Violet 785™ anti-human CD159a (NKG2A), TotalSeq™-B1374 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), Spark Red™ 718 anti-human CD159a (NKG2A) (Flexi-Fluor™), Brilliant Violet 711™ anti-human CD159a (NKG2A), PE/Cyanine7 anti-human CD159a

Product Data



Human peripheral blood lymphocytes were stained with CD3 FITC and CD159a (NKG2A) (clone S19004C) APC (left) or mouse IgG1, κ APC isotype control (right).

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