

TotalSeq™-A0802 anti-human CD336 (NKp44) Antibody

Catalog# / Size	325117 / 10 µg
Clone	P44-8
Regulatory Status	RUO
Other Names	NKp44, NCR2, Activating NK receptor NKp44, natural cytotoxicity triggering receptor 2, lymphocyte antigen 95 homolog
Isotype	Mouse IgG1, κ
Barcode Sequence	GGGCAATTAGCGAGT
Description	CD336 is also known as activating NK receptor NKp44 (NKp44), natural cytotoxicity triggering receptor 2, and lymphocyte antigen 95 homolog. It is a type I transmembrane protein, member of the natural cytotoxicity receptor family that contains one immunoglobulin-like domain. NKp44 has an apparent molecular weight of 44 kD and three isoforms are produced by alternative splicing. NKp44 is expressed on IL-2 activated NK cells and a subset of γ/δ T cells. NKp44 enhances NK cell mediated cytolysis of virus infected cells and tumor cells. NKp44 has been shown to associate with the intracellular adaptor DAP12.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	recombinant human NKp44
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 1 mM EDTA.
Preparation	The antibody was purified by chromatography and conjugated with TotalSeq™-A oligomer under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	PG - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis and the oligomer sequence is confirmed by sequencing. TotalSeq™-A antibodies are compatible with 10x Genomics Single Cell Gene Expression Solutions .

To maximize performance, it is strongly recommended that the reagent be titrated for each application, and that you centrifuge the antibody dilution before adding to the cells at 14,000xg at 2 - 8°C for 10 minutes. Carefully pipette out the liquid avoiding the bottom of the tube and add to the cell suspension. For Proteogenomics analysis, the suggested starting amount of this reagent for titration is ≤ 1.0 µg per million cells in 100 µL volume. Refer to the corresponding TotalSeq™ protocol for specific staining instructions.

Buyer is solely responsible for determining whether Buyer has all intellectual property rights that are necessary for Buyer's intended uses of the BioLegend TotalSeq™ products. For example, for any technology platform Buyer uses with TotalSeq™, it is Buyer's sole responsibility to determine whether it has all necessary third party intellectual property rights to use that platform and TotalSeq™ with that platform.

Application Notes	The p44-8 antibody against human NKp44 has been shown to be useful for flow cytometry, stimulation of human NK cells via NKp44 in a redirected lysis assay, and blocking of NKp44 function in solution. Additional reported applications (for the relevant formats) include: stimulation of human NK cells via NKp44 in a redirected lysis assay, and blocking of NKp44 function in solution ^{1,2} . The LEAF™ purified antibody (Endotoxin < 0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for
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functional assays (Cat. No. 325104).

Additional Product Notes

TotalSeq™ reagents are designed to profile protein levels at a single cell level following an optimized protocol similar to the CITE-seq workflow. A compatible single cell device (e.g. [10x Genomics Chromium System and Reagents](#)) and sequencer (e.g. Illumina analyzers) are required. Please contact [technical support](#) for more information, or visit biolegend.com/totalseq.

The barcode flanking sequences are CCTTGGCACCCGAGAATTCCA (PCR handle), and BAAA*A*A (capture sequence). B represents either C, G, or T, and * indicates a phosphorothioated bond, to prevent nuclease degradation.

View more applications data for this product in our [Scientific Poster Library](#).

Application References

(PubMed link indicates BioLegend citation)

1. Sommaggio R, *et al.* 2012. *J. Immunol.* 188:2075. (Block)
2. Hoechst B, *et al.* 2009. *Hepatology.* 50:799. (Block) [PubMed](#)
3. Correia DV, *et al.* 2011. *Blood.* 118:992. (FC) [PubMed](#)

RRID

AB_2819953 (BioLegend Cat. No. 325117)

Antigen Details

Structure

Type I transmembrane protein, member of the natural cytotoxicity receptor family, contains one immunoglobulin-like domain. Approximately 44 kD. Three isoforms produced by alternative splicing.

Distribution

IL-2 activated NK cells and cell lines, some γ/δ T cells activated *in vitro*

Function

NK cell triggering of cytolysis toward tumor targets and other target cells deficient in MHC class I molecules

Interaction

DAP12

Cell Type

NK cells, T cells

Biology Area

Immunology

Molecular Family

CD Molecules

Antigen References

1. Cantoni C, *et al.* 1999. *J. Exp. Med.* 189:787.
2. Allcock RJN, *et al.* 2003. *Eur. J. Immunol.* 33:567.
3. Cantoni C, *et al.* 2003. *Structure.* 11:725.

Gene ID

[9436](#)

Related Protocols

[TotalSeq™-A Antibodies and Cell Hashing with 10x Single Cell 3' Reagent Kit v3 3.1 Protocol](#)

Other Formats

Purified anti-human CD336 (NKp44), Biotin anti-human CD336 (NKp44), PE anti-human CD336 (NKp44), APC anti-human CD336 (NKp44), Alexa Fluor® 647 anti-human CD336 (NKp44), PerCP/Cyanine5.5 anti-human CD336 (NKp44), PE/Cyanine7 anti-human CD336 (NKp44), TotalSeq™-C0802 anti-human CD336 (NKp44), Ultra-LEAF™ Purified anti-human CD336 (NKp44), TotalSeq™-A0802 anti-human CD336 (NKp44), APC/Cyanine7 anti-human CD336 (NKp44) Antibody, KIRAVIA Blue 520™ anti-human CD336 (NKp44), PE/Fire™ 810 anti-human CD336 (NKp44)

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