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Reporting Summary

Nature Portfolio wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Portfolio policies, see our Editorial Policies and the Editorial Policy Checklist.

Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.

n/a	Confirmed	
☐	☒	The exact sample size (*n*) for each experimental group/condition, given as a discrete number and unit of measurement
☐	☒	A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
☐	☒	The statistical test(s) used AND whether they are one- or two-sided *Only common tests should be described solely by name; describe more complex techniques in the Methods section.*
☐	☒	A description of all covariates tested
☐	☒	A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
☐	☒	A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
☐	☒	For null hypothesis testing, the test statistic (e.g. *F*, *t*, *r*) with confidence intervals, effect sizes, degrees of freedom and *P* value noted *Give P values as exact values whenever suitable.*
☒	☐	For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
☒	☐	For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
☒	☐	Estimates of effect sizes (e.g. Cohen's *d*, Pearson's *r*), indicating how they were calculated

Our web collection on statistics for biologists contains articles on many of the points above.

Software and code

Policy information about availability of computer code

Data collection	BD FACSDiva software (LSRII and Fortessa) or SpectroFlo (Cytek Aurora)was used to collect flow cytometry data. Slidebook 6(3i) was used to collect confocal microscopy data.
Data analysis	Flowjo 10.8.0 for FACS; GraphPad 9.2.0 for statistics; slidebook 6 was used for microscope images; Affymetrix Expression Console v1.1; limma v.3.34.9 ; ggplot2 (v2.2.1); Trim Galore (version 0.5.0) ; Bowtie 2 (version 2.3.5.1) ; Picard MarkDuplicates function (version 2.19.0); SAMtools (version 1.9); BamTools (version 2.5.1); MACS (version 2.1.2); BEDTools (version 2.27.1); bedGraphToBigWig (version 377); deepTools plotHeatmap (version 3.2.1); DiffBind (version 2.16.0); ChIPseeker (version 1.26.2); clusterProfiler (version 3.18.1); STAR (version 2.7.5a) for microarary and sequencing data; Living Image Software (version 4.7.3; Caliper Life Sciences) for Bioluminescence data analysis.

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors and reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Portfolio guidelines for submitting code & software for further information.

Data

Policy information about availability of data

All manuscripts must include a data availability statement. This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A description of any restrictions on data availability
- For clinical datasets or third party data, please ensure that the statement adheres to our policy

RNA-seq, ATAC-seq, CUT&RUN and microarray data that support the findings of this study have been deposited in the Gene Expression Omnibus (GEO; https://

www.ncbi.nlm.nih.gov/geo/) under accession number GSE183619. Publicly available database used in this study are from the Molecular Signatures Database (http://www.broadinstitute.org/gsea/msigdb/)

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

☒ Life sciences ☐ Behavioural & social sciences ☐ Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see nature.com/documents/nr-reporting-summary-flat.pdf

Life sciences study design

All studies must disclose on these points even when the disclosure is negative.

Sample size	No sample size calculation was performed to predetermine sample size. Sample size was selected to maximize the chance of uncovering mean difference which is also statistically significant.
Data exclusions	No data were excluded.
Replication	All the experimental finding were reproduced as validated by at least two independent experiments. For CUT&RUN experiment, at least two replicates were collected for each group.
Randomization	Age-and sex-matched mice were assigned randomly to experimental and control groups. For other experiments samples are randomly located into experiment groups.
Blinding	The investigators were not blinded to group allocation during data collection or analysis, as there was no subjective measurement in our experiments. This approach is considered standard for experiments of the type performed in this study.

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems

n/a	Involved in the study
☐	☒ Antibodies
☐	☒ Eukaryotic cell lines
☒	☐ Palaeontology and archaeology
☐	☒ Animals and other organisms
☐	☒ Human research participants
☒	☐ Clinical data
☒	☐ Dual use research of concern

Methods

n/a	Involved in the study
☒	☐ ChIP-seq
☐	☒ Flow cytometry
☒	☐ MRI-based neuroimaging

Antibodies

Antibodies used

The following antibodies were used for flow cytometry:
Antibodies from Biolegend included APC/Cy7 anti-human CD8a (RPA-T8, 301016), BV785 anti-human CD45RA (HI100, 304139), PE anti-human CD62L (DREG-56, 304806), APC anti-human CD27 (M-T271, 356410), PE/Cy7 anti-human CCR7 (G043H7, 353226), BV421 anti-human CD95 (DX2, 305623), BV785 anti-mouse/human CD44 (IM7, 103059), BV510 anti-mouse KLRG1 (2F1/KLRG1, 138421), KIRAVIA Blue 520 anti-mouse CD62L (MEL-14, 104464), BV605 anti-mouse CD127 (A7R34, 135025), BV650 anti-mouse CX3CR1 (SA011F11, 149033), APC anti-mouse CD8a(53-6.7, 100712), Alexa Fluor 700 anti-mouse CD45.2 (104, 109822), APC anti-mouse CD98 (RL388, 128212); PE anti-mouse CXCR3 (CXCR3-173, 12-1831-82, eBioscience); and BUV395 anti-human CD3 (UCHT1, 563548), BUV805 anti-human CD45RO (UCHL1, 748367); BUV496 anti-mouse CD45.1 (A20, 741093), BUV805 anti-mouse CD8a (53-6.7, 612898) were acquired from BD Biosciences. anti-IFN-g (XMG1.2, 505826, BioLegend), anti-TNF-a (MP6-XT22, 17-7321-82, Thermo Fisher Scientific) and anti-Granzyme B (GB11, 515405, BioLegend).
All flow cytometry antibodies are used as 1:200.

The following antibodies were used for western blot:
anti-Arid1a (1:1000; D2A8U, 12354S, Cell Signaling Technology), anti-Brg1 (1:1000; EPNCIR111A, ab110641, Abcam), anti-Brg1 (1:1000; G-7, sc-17796, Santa Cruz), anti-c-Myc (1:1000; D84C12, 5605S, Cell Signaling Technology), anti-smarcb1 (1:1000; EPR20189, ab222519, Abcam), anti-Pbrm1 (1:1000; ABE70, Millipore), anti-Brm (1:1000; ab15597, Abcam), anti-Smarcd1 (1:1000; A301-594, Bethyl), anti-Smarcd2 (1:1000; A301-596A, Bethyl), anti-Baf57 (1:1000; EPR8849, ab137081, Abcam), anti-Baf155 (1:1000; D7F8S, 11956, Cell Signaling Technology), anti-Baf170 (1:1000; 8829, Cell Signaling Technology), anti-Baf45c (1:1000; PA5-38011, ThermoFisher Scientific), anti-Baf45d (1:1000; A303-595A, Bethyl), anti-Brd7 (1:1000; B-8, sc376180, Santa Cruz), anti-Brd9 (1:1000;

61537, Active Motif), anti-Actin (1:1000; C-4, sc-47778, Santa Cruz), anti-Gapdh (1:1000; 6C5, MAB374, Millipore).

The following antibodies were used for imaging:
anti-c-Myc (1:500, 5605, Cell Signaling Technology), anti-Arid1a (1:500, ab182560, Abcam), anti-Brg1 (1:500, ab110641, Abcam), anti-Smarcb1 (1:250, 222519, Abcam), anti-tubulin (1:1000, T9026, Sigma), anti-tubulin (1:1000, MA1-80189, Invitrogen), anti-Lamin B1 (1:500, ab16048, Abcam), anti-BAF180 (1:500, ABE70, EMD Millipore), anti-PBRM1 (1:200, A700-019, Bethyl Laboratories).
anti-c-Myc (1:500, D84C12, 5605, Cell Signaling Technology), anti-Arid1a (1:500, EPR13501, ab182560, Abcam), anti-Brg1 (1:500, EPNCIR111A, ab110641, Abcam), anti-Smarcb1 (1:250, EPR20189, 222519, Abcam), anti-tubulin (1:1000, DM1A, T9026, Sigma), anti-tubulin (1:1000, YOL1/34, MA1-80189, Invitrogen), anti-Lamin B1 (1:500, ab16048, Abcam). Samples were washed twice with TBS and incubated with for 1 hour at RT with the following secondary anti-bodies: anti-rabbit Alexa Fluor plus 555 (1:2000, A32732, Thermo Fisher Scientific), anti-mouse Alexa Fluor plus 647 (1:2000, A32728, Thermo Fisher Scientific), anti-rat Alexa Flour 647 (1:1000, 712-605-153, Jackson ImmunoResearch)

The following antibodies were used for cell culture: anti-CD3 (145-2C11; Bio X Cell, BE0001) and anti-CD28 (37.51; Bio X Cell, BE0015-1).

Validation

The specificities of listed FACS antibodies have been validated by the manufacturer by flow cytometry.
APC/Cy7 anti-human CD8a (RPA-T8, 301016): https://www.biolegend.com/it-it/products/apc-cyanine7-anti-human-cd8a-antibody-832
BV785 anti-human CD45RA (HI100, 304139): https://www.biolegend.com/it-it/products/brilliant-violet-785-anti-human-cd45ra-antibody-7972
PE anti-human CD62L (DREG-56, 304806): https://www.biolegend.com/it-it/products/pe-anti-human-cd62l-antibody-653
APC anti-human CD27 (M-T271, 356410): https://www.biolegend.com/it-it/products/apc-anti-human-cd27-antibody-8467
PE/Cy7 anti-human CCR7 (G043H7, 353226): https://www.biolegend.com/it-it/products/pecyanine7-anti-human-cd197-ccr7-antibody-7694
BV421 anti-human CD95 (DX2, 305623): https://www.biolegend.com/it-it/products/brilliant-violet-421-anti-human-cd95-fas-antibody-7252
BV785 anti-mouse/human CD44 (IM7, 103059): https://www.biolegend.com/it-it/products/brilliant-violet-785-anti-mouse-human-cd44-antibody-7959
BV510 anti-mouse KLRG1 (2F1/KLRG1, 138421): https://www.biolegend.com/it-it/products/brilliant-violet-510-anti-mouse-human-klrg1-mafa-antibody-9943
KIRAVIA Blue 520 anti-mouse CD62L (MEL-14, 104464): https://www.biolegend.com/it-it/products/kiravia-blue-520-anti-mouse-cd62l-antibody-19133
BV605 anti-mouse CD127 (A7R34, 135025): https://www.biolegend.com/it-it/products/brilliant-violet-605-anti-mouse-cd127-il-7ralpha-antibody-8539
BV650 anti-mouse CX3CR1 (SA011F11, 149033): https://www.biolegend.com/it-it/products/brilliant-violet-650-anti-mouse-cx3cr1-antibody-12121
APC anti-mouse CD8a(53-6.7, 100712): https://www.biolegend.com/it-it/products/apc-anti-mouse-cd8a-antibody-150
Alexa Fluor 700 anti-mouse CD45.2 (104, 109822): https://www.biolegend.com/it-it/products/alexa-fluor-700-anti-mouse-cd45-2-antibody-3393
APC anti-mouse CD98 (RL388, 128212): https://www.biolegend.com/it-it/products/apc-anti-mouse-cd98-4f2-antibody-16555
PE anti-mouse CXCR3 (CXCR3-173, 12-1831-82, eBioscience): https://www.thermofisher.com/antibody/product/CD183-CXCR3-Antibody-clone-CXCR3-173-Monoclonal/12-1831-82
BUV395 anti-human CD3 (UCHT1, 563548): https://www.bdbiosciences.com/en-nz/products/reagents/flow-cytometry-reagents/research-reagents/single-color-antibodies-ruo/buv395-mouse-anti-human-cd3.563548
BUV805 anti-human CD45RO (UCHL1, 748367): https://www.bdbiosciences.com/en-nz/products/reagents/flow-cytometry-reagents/research-reagents/single-color-antibodies-ruo/buv805-mouse-anti-human-cd45ro.748367
BUV496 anti-mouse CD45.1 (A20, 741093): https://www.bdbiosciences.com/en-nz/products/reagents/flow-cytometry-reagents/research-reagents/single-color-antibodies-ruo/buv496-mouse-anti-mouse-cd45-1.741093
BUV805 anti-mouse CD8a (53-6.7, 612898): https://www.bdbiosciences.com/en-nz/products/reagents/flow-cytometry-reagents/research-reagents/single-color-antibodies-ruo/buv805-rat-anti-mouse-cd8a.612898
anti-IFN-g (XMG1.2, 505826, BioLegend): https://www.biolegend.com/it-it/products/pe-cyanine7-anti-mouse-ifn-gamma-antibody-5865
anti-TNF-a (MP6-XT22, 17-7321-82, Thermo Fisher Scientific): https://www.thermofisher.com/antibody/product/TNF-alpha-Antibody-clone-MP6-XT22-Monoclonal/17-7321-82
anti-Granzyme B (GB11, 515405, BioLegend): https://www.biolegend.com/it-it/products/alexa-fluor-647-anti-human-mouse-granzyme-b-antibody-6067

The specificities of listed WB antibodies have been validated by the manufacturer by western blot.
anti-Arid1a (1:1000; D2A8U, 12354S, Cell Signaling Technology): https://www.cellsignal.com/products/primary-antibodies/arid1a-baf250a-d2a8u-rabbit-mab/12354
anti-Brg1 (1:1000; EPNCIR111A, ab110641, Abcam): https://www.abcam.com/brg1-antibody-epncir111a-ab110641.html
anti-Brg1 (1:1000; G-7, sc-17796, Santa Cruz): https://www.scbt.com/zh/p/brg-1-antibody-g-7
anti-c-Myc (1:1000; D84C12, 5605S, Cell Signaling Technology): https://www.cellsignal.com/products/primary-antibodies/c-myc-d84c12-rabbit-mab/5605?site-search-type=Products&N=4294956287&Ntt=c-myc&fromPage=plp
anti-smarcb1 (1:1000; EPR20189, ab222519, Abcam): https://www.abcam.com/snf5smarcb1-antibody-epr20189-ab222519.html
anti-Pbrm1 (1:1000; ABE70, Millipore): https://www.emdmillipore.com/US/en/product/Anti-BAF180-Antibody,MM_NF-ABE70
anti-Brm (1:1000; ab15597, Abcam): https://www.abcam.com/smarca2--brm-antibody-ab15597.html
anti-Smarcd1 (1:1000; A301-594, Bethyl): https://www.fortislife.com/products/primary-antibodies/rabbit-anti-smarcd1baf60a-antibody/BETHYL-A301-594
), anti-Smarcd2 (1:1000; A301-596A, Bethyl): https://www.fortislife.com/products/primary-antibodies/rabbit-anti-smarcd2baf60b-antibody/BETHYL-A301-596
anti-Baf57 (1:1000; EPR8849, ab137081, Abcam): https://www.abcam.com/baf57smarce1-antibody-epr8849-chip-grade-ab137081.html
anti-Baf155 (1:1000; D7F8S, 11956, Cell Signaling Technology): https://www.cellsignal.com/products/primary-antibodies/smarcc1-baf155-d7f8s-rabbit-mab/11956

anti-Baf170 (1:1000; 8829, Cell Signaling Technology): https://www.cellsignal.com/products/primary-antibodies/smarcc2-baf170-antibody/8829
anti-Baf45c (1:1000; PA5-38011, ThermoFisher Scientific): https://www.thermofisher.com/antibody/product/DPF3-Antibody-Polyclonal/PA5-38011
anti-Baf45d (1:1000; A303-595A, Bethyl): https://www.fortislife.com/products/primary-antibodies/rabbit-anti-dpf2-antibody/BETHYL-A303-595
anti-Brd7 (1:1000; B-8, sc376180, Santa Cruz): https://www.scbt.com/p/brd7-antibody-b-8?requestFrom=search
anti-Brd9 (1:1000; 61537, Active Motif): https://www.activemotif.com/catalog/details/61537
anti-Actin (1:1000; C-4, sc-47778, Santa Cruz): https://www.scbt.com/p/beta-actin-antibody-c4?requestFrom=search
anti-Gapdh (1:1000; 6C5, MAB374, Millipore): https://www.emdmillipore.com/US/en/product/Anti-Glyceraldehyde-3-Phosphate-Dehydrogenase-Antibody-clone-6C5,MM_NF-MAB374

The specificities of listed imaging antibodies have been validated by the manufacturer by imaging.
anti-c-Myc (1:500, D84C12, 5605, Cell Signaling Technology): https://www.cellsignal.com/products/primary-antibodies/c-myc-d84c12-rabbit-mab/5605?site-search-type=Products&N=4294956287&Ntt=c-myc&fromPage=plp
anti-Arid1a (1:500, EPR13501, ab182560, Abcam): https://www.abcam.com/arid1a-antibody-epr13501-ab182560.html
anti-Brg1 (1:500, EPNCIR111A, ab110641, Abcam): https://www.abcam.com/brg1-antibody-epncir111a-ab110641.html
anti-Smarcb1 (1:250, EPR20189, 222519, Abcam): https://www.abcam.com/snf5smarcb1-antibody-epr20189-ab222519.html
anti-tubulin (1:1000, DM1A, T9026, Sigma): https://www.sigmaaldrich.com/US/en/search/t9026?focus=products&page=1&perpage=30&sort=relevance&term=t9026&type=product
anti-tubulin (1:1000, YOL1/34, MA1-80189, Invitrogen): https://www.thermofisher.com/antibody/product/alpha-Tubulin-Antibody-clone-YOL1-34-Monoclonal/MA1-80189
anti-Lamin B1 (1:500, ab16048, Abcam): https://www.abcam.com/lamin-b1-antibody-nuclear-envelope-marker-ab16048.html
anti-BAF180 (1:500, ABE70, EMD Millipore): https://www.emdmillipore.com/US/en/product/Anti-BAF180-Antibody,MM_NF-ABE70
anti-PBRM1 (1:200, BL-39-2C3, A700-019, Bethyl Laboratories):
anti-rabbit Alexa Fluor plus 555 (1:2000, A32732, Thermo Fisher Scientific): https://www.fortislife.com/products/primary-antibodies/rabbit-anti-pbrm1-recombinant-monoclonal-antibody-bl-39-2c3/BETHYL-A700-019https://www.thermofisher.com/antibody/product/Goat-anti-Rabbit-IgG-H-L-Highly-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A32732
anti-mouse Alexa Fluor plus 647 (1:2000, A32728, Thermo Fisher Scientific): https://www.thermofisher.com/antibody/product/Goat-anti-Mouse-IgG-H-L-Highly-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A32728
anti-rat Alexa Flour 647 (1:1000, 712-605-153, Jackson ImmunoResearch): https://www.jacksonimmuno.com/catalog/products/712-605-153

The listed antibodies have been validated by the manufacturer:
anti-CD3e (145-2C11; Bio X Cell, BE0001):https://bxcell.com/product/m-cd3e/
anti-CD28 (37.51; Bio X Cell, BE0015-1): https://bxcell.com/product/m-cd28/

Eukaryotic cell lines

Policy information about cell lines

Cell line source(s)	B16-Ova and MC38-Ova cell line were kindly provided by Dr. Dario Vignali. F420 cell line was provided by Dr. Jason T Yustein. GL261 glioma cell line was purchased from DSMZ German Collection Laboratory. HEK293T and GP+E-86 cell line were purchased from ATCC.
Authentication	The cell line used was not authenticated
Mycoplasma contamination	The cell line was not tested for mycoplasma contamination.
Commonly misidentified lines (See ICLAC register)	No commonly misidentified cell line were used.

Animals and other organisms

Policy information about studies involving animals; ARRIVE guidelines recommended for reporting animal research

Laboratory animals	Mice were housed and bred at the St. Jude Children's Research Hospital Animal Resource Center in specific pathogen-free conditions. Mice were on 12-hour light/dark cycles that coincide with daylight in Memphis, TN, USA. The St. Jude Children's Research Hospital Animal Resource Center housing facility was maintained at 20–25 C and 30–70 % humidity. All genetic models were on the C57BL/6 background. Both male and female mice were used for analysis and quantification. All mice were used at 8–16 weeks old. We crossed Rosa26-Cas9 knock-in mice with OT-I transgenic mice to express Cas9 in antigen-specific CD8+ T cells (called Cas9-OT-I mice). The Cas9 mice were fully backcrossed to the C57BL/6 background. Arid1afl/fl mice were provided by C. Roberts. c-Myc-GFP fusion knock-in mice were provided by B. Sleckman. T cell-specific deletion of Pbrm1 was achieved by breeding Cd4Cre mice with Pbrm1fl/fl mice. c-Mycfl/fl mice were obtained from F. Alt and were backcrossed five generations onto the C57BL/6 background before breeding to Rosa26Cre-ERT2 mice. C57BL/6 mice , B6 Albino mice, , CAG-luc-eGFP L2G85 transgenic mice and Rag1–/– mice were purchased from the Jackson Laboratory.
Wild animals	This study did not involve wild animals
Field-collected samples	The study did not involve samples collected from the field.

Ethics oversight	Mouse studies were conducted in accordance with protocols approved by the St. Jude Children's Research Hospital Committee on Care and Use of Animals and in compliance with all relevant ethical guidelines.

Note that full information on the approval of the study protocol must also be provided in the manuscript.

Human research participants

Policy information about studies involving human research participants

Population characteristics	Blood were from healthy blood donor. Age and other information of blood donor are unavailable.
Recruitment	Blood from healthy normal blood donor were collected by the Blood Donor Center at St. Jude Children's Research Hospital. Asperesis rings for research are byproduct of normal donations. Samples were used without any selection.
Ethics oversight	All human studies were in compliance with the Declaration of Helsinki. Blood donors were recruited by the Blood Donor Center at St. Jude Children's Research Hospital. Blood donors provided written consent for research use of their blood products not used in transfusions, which has been reviewed and approved by the Institutional Review Board at St. Jude Children's Research Hospital.

Note that full information on the approval of the study protocol must also be provided in the manuscript.

Flow Cytometry

Plots

Confirm that:

☒ The axis labels state the marker and fluorochrome used (e.g. CD4-FITC).

☒ The axis scales are clearly visible. Include numbers along axes only for bottom left plot of group (a 'group' is an analysis of identical markers).

☒ All plots are contour plots with outliers or pseudocolor plots.

☒ A numerical value for number of cells or percentage (with statistics) is provided.

Methodology

Sample preparation	The spleens and peripheral lymph nodes (PLNs) were gently separated under nylon mesh using the flat end of a 3-mL syringes. Red blood cells were removed by ACK lysing buffer, followed by washing cells with isolation buffer. After spinning down, the cell pellets were resuspended and filtered with nylon mesh before staining. For the examination of tumour infiltrating lymphocytes, tumours were excised, minced and digested with 0.5 mg/ml Collagenase IV (Roche) + 200 UI/ml DNase I (Sigma) for 1 h at 37 °C, and then passed through 70-µm filters to remove undigested tumour tissues. Lung and liver were collected and minced into small pieces using razor blades. The organs were digested in dissociation buffer containing 1 mg/ml of collagenase IV (LS004188, Worthington Biochemicals) and 0.5 mg/ml of DNase I (DN25-1G, Sigma-Aldrich) at 37°C for 30 min on a 3D orbital mixer. The cell suspensions were then passed through 70-µm filters to remove undigested tissues and followed by density-gradient centrifugation over Percoll (17089101, GE Healthcare).
Instrument	LSRII, Fortessa (BD Bioscience) or Aurora (Cytek)
Software	Flowjo 10.8.0
Cell population abundance	The purities of the sorted sgRNA transduced cells were more than 98%
Gating strategy	Based on the pattern of FSC-A/SSC-A, cells in the lymphocyte gate were used for analysis of T cell subsets. Singlets were gated according to the pattern of FSC-H vs. FSC-A. Positive populations were determined by the specific antibodies, which were distinct from negative populations.

☒ Tick this box to confirm that a figure exemplifying the gating strategy is provided in the Supplementary Information.