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Last updated by author(s): 03/09/2019

Reporting Summary

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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	Data was collected using Microsoft Excel 2016 64-bit (Microsoft), Vevo 2100 ultrasound imaging system, iQ3 (Andor), the PerkinElmer Vectra platform, Axio Scan.Z1 (Zeiss), FACS Diva Version 8.0.1 (BD Biosciences), NanoSight LM10 Nanoparticle Characterization system, AMT Imaging System (Advanced Microscopy Techniques Corp.).
Data analysis	Data was analyzed using GraphPad Prism Version 7.03, SAS JMP Pro software version 12.1.0, the R language environment for statistical computing version 3.1.3, imageJ 1.52 (NIH, USA), the FilamentTracer module in the Imaris software (Bitplane), the Simple Neurite Tracer plugin in the Fiji build of ImageJ (NIH), TissueFinder in PerkinElmer inForm software, Pannoramic Viewer (3DHISTECH), FACSDiva 8.0 software (BD Biosciences), FlowJo 1.0.1, Kaluza software (Beckman Coulter), the package edgeR, QIAGEN Ingenuity Pathway Analysis. Western blots were cropped in Adobe Photoshop CC 2017 and Adobe Illustrator CC 2017. miRNA analysis: Cutadapt version 1.8.1 for trimming adapters from reads, BWA version 0.7.15 for mapping the short reads, SAMtools version 1.2 for manipulating bam/sam files featureCounts from Subread version 1.5.2 for miRNA quantification. mRNA analysis: murine: FastQC version 0.11.7 for read quality check, TopHat2 version 2.0.14 for mapping, SAMtools version 1.2 for manipulating bam/sam files, HTSeq version 0.6.1 for gene quantification; human: FastQC version 0.11.8 for read quality check, TopHat2 version 2.1.1 for mapping, SAMtools version 1.2 for manipulating bam/sam files, HTSeq version 0.11.0 for gene quantification.

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/reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Research 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 list of figures that have associated raw data
- A description of any restrictions on data availability

Source data for the figures and extended data figures are provided. The datasets generated during the current study are available from the corresponding authors upon reasonable request.

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	Samples sizes from other experiments were estimated from similar experiments in former publications of the group. Sample sizes for clinical data: No statistical methods were used to predetermine sample sizes and samples were selected based upon the availability of data as outlined below. -TCGA cohorts of head and neck cancer (oral cancer) were assessed. -TP53 status and the expression levels of tyrosine hydroxylase, vesicular cetylcholine transporter, neurofilament-light, and neurofilament-heavy in glossectomy tissues from treatment-naïve patients with tongue cancer treated at the University of Texas MD Anderson Cancer Center, Houston, Texas were analyzed (n = 24, 12 with wild-type TP53 and 12 with mutant TP53). -The expression levels of tyrosine hydroxylase within tumor areas in patients with oral cavity squamous cell carcinoma was evaluated and compared with their clinical characteristics and survival (n = 70). For human DRGs, experiments were prioritized based on the availability of the specimen. In vitro studies: sample sizes were determined based on the results of pilot studies, and previous similar studies that have given statistically significant results. In vivo studies: Animal experiments were conducted using between three and 13 mice per group, based on the results of pilot studies and previous studies (that have given statistical significant results based on the variance of xenograft growth in control mice. These power calculations indicated use of at least 3 mice per genotype to give 80% power to detect an effect size of 20% with a significance level of 0.05).
Data exclusions	No data excluded.
Replication	All attempts at replication were successful. Experiments were performed at least two times and/or with sufficient cells/animals per group to demonstrate statistical significance. Number of replicates of each experiment is indicated in the corresponding figure legend. Data was replicated using: 1. Human specimen (cancer and neurons) 2. Orthotopic xenograft models (HN30, HN31, PCI13, p53- and miR34- isogenic cell lines) 3. Transgenic (Trp53) model We have designed (CRISPR/Cas9) 2 independent clones (#11 and#18) of RAB27A-/-;RAB27B-/- knock out cells. We have designed p53 function studies using genetic approach with 5 isogenic PCI-13 (exogenous p53) cell lines and 2 isogenic HN30 (endogenous p53) OCSCC cell lines.
Randomization	Animals were randomly allocated for surgical denervation or carvedilol/6OHDA treatment prior to surgery or treatment initiation, respectively. For exosome injection studies and orthotopic models with no intervention (other than tumor engraftment) animals were randomly allocated prior to cell inoculation.
Blinding	The researchers were blinded during the measurement of the tumor size and body weight of mice except in the experiment shown in Fig. 3i-k. The researchers were blinded during outcome assessment.

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
☐	☒ Animals and other organisms
☐	☒ Human research participants
☒	☐ Clinical data

Methods

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

Antibodies

Antibodies used

Rat anti-human/mouse Oct3/4-APC (Clone:240408, R&D systems, cat#:IC1759A, 1:400).
Mouse anti-human CD63 (unconjugated, Clone TS63, Abcam, cat#:ab59479, 1:1000 ,Lot:GR3186539-1).
Rabbit anti-TRPV1 (unconjugated, Clone VR1, Alomone Labs cat#:ACC-030; 1:500, Lot:ACC030AG1040).
Rabbit anti-doublecortin (unconjugated, polyclonal, Abcam, cat#:ab18723, 1:1000, Lot#: GR3224908-1).
Rabbit anti-Rab27B (unconjugated, polyclonal, Abcam, cat#:ab103418, 1:200, Lot #: GR3238038-3).
Mouse anti-Rab27A (unconjugated, monoclonal, Abcam, cat#:ab55667, 1:200, Lot #: GR3198959-1).
Rabbit anti-TH (unconjugated, polyclonal, Bioss, cat#:bs-0016R-A488, 1:50, Lot:AE092200).
Mouse anti-TP53 (unconjugated, Clone DO-1, Cell Signaling, cat#:18032, 1:1000).
Rabbit anti-Notch1 (unconjugated, Clone D1E11, Cell Signaling, cat#:3608, 1:1000).
Mouse anti-β actin (unconjugated, Clone AC-15, Sigma, cat#:A1978, 1:4000).
Mouse anti neuron-specific β3-tubulin-APC (Clone TUJ-1, R&D systems, cat#:IC1195A, 1:100, Lot: ABFK0117091).
Rabbit anti-Oct4 (unconjugated, polyclonal, Abcam, cat#:ab18976, 1:100, Lot:GR3202710-3).
Rabbit anti-β3-tubulin (polyclonal, unconjugated, Abcam, cat#:ab18207, 1:2000, Lot#: GR3221401-3 and GR3196636-1).
Chicken anti-neurofilament heavy (polyclonal, unconjugated, Abcam, cat#:ab4680, 1:1000, Lot:GR3241438-4).
Rabbit anti-MASH1/ASCL1 (polyclonal, unconjugated, Abcam, cat#:ab74065; 1:250, Lot:GR3178505-1).
Rabbit anti-TH (polyclonal, unconjugated, EMD Millipore, cat#: AB152, 1:400, Lot:2971004, 3031639 and 3072361).
Rabbit anti-neurogenin2 (unconjugated, polyclonal, EMD Millipore, cat#:AB5682, 1:400, Lot:3066197).
Rabbit anti-neurofilament heavy polypeptide (unconjugated, polyclonal, Abcam, cat#:ab8135, 1:1000, Lot:GR3224043-9).
Chicken anti-68kDa NF/NF-L (unconjugated, polyclonal, Abcam, cat#:ab24520, 1:700, Lot:GR3206616-5).
Mouse anti-SOX2 (unconjugated, Clone 245610, R&D systems, cat#: IC2018V-100UG, 1:500, Lot:1502977).
Rabbit anti-neurofilament L (unconjugated, polyclonal, EMD Millipore, cat#:AB9568, 1:700, Lot:2943223).
Goat anti-VAChT (unconjugated, polyclonal, EMD Millipore, cat#:ABN100, 1:1000, Lot: 2899777).
Chicken anti-Tbr2 (unconjugated, polyclonal, EMD Millipore, cat#:AB15894, 1:500, Lot:3071578).
Mouse anti-pancytokeratin (unconjugated, Polyclonal PAN-CK, ThermoFisher, cat#:MA5-13203, 1:50).
Rabbit anti-KLF4 (unconjugated, polyclonal Novus, cat#:NBP2-24749, 1:100, Lot:05232589B-07).

Validation

Well-validated human and mouse antibodies were purchased from established commercial vendors, including Abcam, Sigma, EMD Milipore, Novus, Bioss, R&D Systems, Cell Signaling, and Life Technologies. Unless otherwise noted, antibodies were used at manufacturer- and primary literature-validated concentrations for the relevant assays, as detailed below:
Rat anti-human/mouse Oct3/4-APC (Clone:240408, R&D systems, cat#:IC1759A, 1:400). Mutnal MB et al. Murine cytomegalovirus infection of neural stem cells alters neurogenesis in the developing brain. PLoS ONE, 6(1):e16211 (2011). Validated data in FC by the provider.
Mouse anti-human CD63 (unconjugated, Clone TS63, Abcam, cat#:ab59479, 1:1000 ,Lot:GR3186539-1), Matsuzaki K et al. MiR-21-5p in urinary extracellular vesicles is a novel biomarker of urothelial carcinoma. Oncotarget 8:24668-24678 (2017). Zonneveld MI et al. Recovery of extracellular vesicles from human breast milk is influenced by sample collection and vesicle isolation procedures. J Extracell Vesicles 3:N/A (2014). Validated data in IHC, WB, IF by the provider.
Rabbit anti-TRPV1 (unconjugated, Clone VR1, Alomone Labs cat#:ACC-030; 1:500, Lot:ACC030AG1040), Devesa et al. αCGRP is essential for algesic exocytotic mobilization of TRPV1 channels in peptidergic nociceptors. Proc Natl Acad Sci U S A. 111(51):18345-50 (2014). Knockout-validated by provider.
Rabbit anti-doublecortin (unconjugated, polyclonal, Abcam, cat#:ab18723, 1:1000, Lot#: GR3224908-1), Kovalchuk Y et al. In vivo odourant response properties of migrating adult-born neurons in the mouse olfactory bulb. Nat Commun 6:6349 (2015). Validated data in IHC, WB, FC, IF by the provider.
Rabbit anti-Rab27B (unconjugated, polyclonal, Abcam, cat#:ab103418, 1:200, Lot #: GR3238038-3). Jiang Y et al. MicroRNA-599 suppresses glioma progression by targeting RAB27B. Oncol Lett 16:1243-1252 (2018). Validated data in WB by the provider.
Mouse anti-Rab27A (unconjugated, monoclonal, Abcam, cat#:ab55667, 1:200, Lot #: GR3198959-1). Uchino K et al. Therapeutic Effects of MicroRNA-582-5p and -3p on the Inhibition of Bladder Cancer Progression. Mol Ther 21:610-9 (2013). Knockout-validated data in WB by the provider.
Rabbit anti-TH (unconjugated, polyclonal, Bioss, cat#:bs-0016R-A488, 1:50, Lot:AE092200). Validated data in IHC, WB, FC by the provider. Additional supportive validation exist in Antibodypedia.
Mouse anti-TP53 (unconjugated, Clone DO-1, Cell Signaling, cat#:18032, 1:1000). Validated data in WB by the provider.
Rabbit anti-Notch1 (unconjugated, Clone D1E11, Cell Signaling, cat#:3608, 1:1000). Man, Jianghong, et al. Hypoxic induction of vasorin regulates Notch1 turnover to maintain glioma stem-like cells. Cell stem cell. 22.1:104-118 (2018).Validated data in WB by the provider.
Mouse anti-β actin (unconjugated, Clone AC-15, Sigma, cat#:A1978, 1:4000). Validated data in WB by the provider.
Mouse anti neuron-specific β3-tubulin-APC (Clone TUJ-1, R&D systems, cat#:IC1195A, 1:100, Lot: ABFK0117091). Noristani HN et

al. Spinal cord injury induces astroglial conversion towards neuronal lineage. Mol Neurodegener. 11(1):68 (2016). Validated data in FC by the provider.
Rabbit anti-Oct4 (unconjugated, polyclonal, Abcam, cat#:ab18976, 1:100, Lot:GR3202710-3), Hassiotou F et al. Expression of the Pluripotency Transcription Factor OCT4 in the Normal and Aberrant Mammary Gland. Front Oncol 3:79 (2013). Lee SJ et al. Adult stem cells from the hyaluronic acid-rich node and duct system differentiate into neuronal cells and repair brain injury. Stem Cells Dev 23:2831-40 (2014). Validated data in IHC, WB by the provider.
Rabbit anti-β3-tubulin (polyclonal, unconjugated, Abcam, cat#:ab18207, 1:2000, Lot#: GR3221401-3 and GR3196636-1), Delgado-Esteban M et al. APC/C-Cdh1 coordinates neurogenesis and cortical size during development. Nat Commun 4:2879 (2013). Validated data in IHC, WB, FC, IF by the provider.
Chicken anti-neurofilament heavy (polyclonal, unconjugated, Abcam, cat#:ab4680, 1:1000, Lot:GR3241438-4). Wirt SE et al. G1 arrest and differentiation can occur independently of Rb family function. J Cell Biol 191:809-25 (2010). Validated data in IHC, WB, IF by the provider.
Rabbit anti-MASH1/ASCL1 (polyclonal, unconjugated, Abcam, cat#:ab74065; 1:250, Lot:GR3178505-1). Validated data in IHC, WB, IF by the provider.
Rabbit anti-TH (polyclonal, unconjugated, EMD Millipore, cat#: AB152, 1:400, Lot:2971004, 3031639 and 3072361), Magnon C et al. Autonomic Nerve Development Contributes to Prostate Cancer Progression. Science 341(6142):1236361 (2013). Validated data in IHC, ELISA WB, IF by the provider.
Rabbit anti-neurogenin2 (unconjugated, polyclonal, EMD Millipore, cat#:AB5682, 1:400, Lot:3066197), Validated data in IHC, ELISA WB, IF by the provider.
Rabbit anti-neurofilament heavy polypeptide (unconjugated, polyclonal, Abcam, cat#:ab8135, 1:1000, Lot:GR3224043-9); Woo SH et al. Piezo2 is required for Merkel-cell mechanotransduction. Nature 509:622-6 (2014). Validated data in IHC, WB, IF by the provider.
Chicken anti-68kDa NF/NF-L (unconjugated, polyclonal, Abcam, cat#:ab24520, 1:700, Lot:GR3206616-5), Validated data in IHC, WB, IF by the provider.
Mouse anti-SOX2 (unconjugated, Clone 245610, R&D systems, cat#: IC2018V-100UG, 1:500, Lot:1502977). Najm, FJ et al. Transcription factor-mediated reprogramming of fibroblasts to expandable, myelinogenic oligodendrocyte progenitor cells. Nat Biotechnol, 31(5):426-33 (2013). Validated data in WB, FC, IF by the provider.
Rabbit anti-neurofilament L (unconjugated, polyclonal, EMD Millipore, cat#:AB9568, 1:700, Lot:2943223), Validated data in IHC by the provider.
Goat anti-VAChT (unconjugated, polyclonal, EMD Millipore, cat#:ABN100, 1:1000, Lot: 2899777), Validated data in IHC by the provider.
Chicken anti-Tbr2 (unconjugated, polyclonal, EMD Millipore, cat#:AB15894, 1:500, Lot:3071578); He Y et al. ALK5-dependent TGF-β signaling is a major determinant of late-stage adult neurogenesis. Nature neuroscience, 17:943-52 (2014). Validated data in WB, IHC by the provider.
Mouse anti-pancytokeratin (unconjugated, Polyclonal PAN-CK, ThermoFisher, cat#:MA5-13203, 1:50), Validated data in WB, IHC, IF by the provider. Additional supportive validation exist in Antibodypedia.
Rabbit anti-KLF4 (unconjugated, polyclonal Novus, cat#:NBP2-24749, 1:100, Lot:05232589B-07). Validated data in WB, IHC, FC by the provider. Additional supportive validation exist in Antibodypedia.

Eukaryotic cell lines

Policy information about cell lines

Cell line source(s)	PCI-13 cells were obtained from the laboratory of Dr. Jennifer Grandis (University of Pittsburgh, Pittsburgh, PA). HN30 and HN31 cells were obtained from the laboratory of Dr. John Ensley (Wayne State University, Detroit, MI) and from Dr. Barbara Frederick (University of Colorado Health Sciences Center-Colorado), respectively.
Authentication	All human cell lines were authenticated upon arrival by STR profiling using 14 short tandem repeat (STR) loci including the gender determining locus, Amelogenin.
Mycoplasma contamination	All cell lines were tested for mycoplasma contamination periodically, including immediately upon receipt via the MycoAlert Mycoplasma Testing Kit (Lonza). Results were always negative for mycoplasma contamination.
Commonly misidentified lines (See ICLAC register)	No commonly misidentified cell lines were used in this study.

Animals and other organisms

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

Laboratory animals	Male or female B6.129P2-Trp53tm1Brn/J, and BALB/c nu/nu (B6.Cg-Foxn1nu+/−) mice at the age of 6 to 8 weeks were obtained from the Jackson Laboratory. Krt5-Cre was obtained from Dr. Carlos Caulin.
Wild animals	No wild animals were used.
Field-collected samples	No field-collected samples were used.
Ethics oversight	Study protocols were approved by the University of Texas MD Anderson Cancer Center Institutional Animal Care and Use Committee (IACUC).

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	Historical specimen of patients who underwent glossectomy and neck dissection and had histologically confirmed and clinically local or locoregional oral cavity cancer at the University of Texas MD Anderson Cancer Center were used. For Human DRG experiments written informed consent for participation, including use of tissue samples, was obtained from each patient prior to inclusion. The protocol was reviewed and approved by The University of Texas MD Anderson Cancer Center Institutional Review Board, and all experiments conformed to relevant guidelines and regulations. Briefly, each donor was undergoing surgical treatment that necessitated ligation of spinal nerve roots to facilitate tumor resection or spinal reconstruction. Spinal roots were ligated proximal to the DRG, spinal roots were sharply cut both proximal and distal to the DRG, and excised DRG were transferred immediately into cold (~4°C) and sterile balanced salt solution containing nutrients. DRG were transported to the laboratory on ice in a sterile, sealed 50-mL centrifuge tube. Upon arrival to the laboratory, each ganglion was carefully dissected from the surrounding connective tissues and sectioned into several ~1- to- 2-mm pieces. DRG were digested in 2 mL of a mixed enzyme solution: 0.1% trypsin (Sigma-Aldrich, T9201), 0.1% collagenase Sigma-Aldrich, C1764; w/v, final concentration), and 0.01% DNase (Sigma-Aldrich, D5025) diluted in DMEM/F-12. The pieces of tissue were transferred to a 37°C rotator to shake at a speed 124-128 revolutions/min. Every 20 minutes, tissue fragments were allowed to settle, and the supernatant/dissociated cells were collected and transferred to DMEM/F-12 with enzyme inhibitor. Supernatant was replaced with 2 mL of fresh digestion solution. The tissue was returned to the 37°C rotator, and this process was repeated until tissue fragments were well digested. Dissociated cells were centrifuged at 180 rpm for 5 minutes, supernatant was removed, and the cells were gently resuspended in culture medium with DMEM/F-12 supplemented with EV free 10% serum and 2 mM glutamine. Cells were plated onto laminin-coated µ-Slide 8 Well (ibidi) and cultured at 37°C with 5% CO2 for 24-72 hours prior to undergoing transfection or labeling.
Recruitment	Human samples were obtained from surgically resected OCSCC patients treated at the department of head and neck surgery at the University Texas MD Anderson Cancer Center, Houston, Tx USA. All patients gave their informed consent for the use of their resected specimen.
Ethics oversight	Study protocols were approved by the University of Texas MD Anderson Cancer Center Institutional Review Board.

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	Primary sensory neurons were isolated from dissected TG as previously described (31). After ganglia dissection, tissue was enzymatically digested with papain (40 U/mL, EMD Millipore) for 20 minutes in 37°C followed by 20 minutes of digestion with collagenase II (4 mg/mL)/dispase II (4.6 mg/mL) solution. Using Percoll gradient (12.5% and 28% Percoll in complete L-15 medium [L-15 with 5% fetal calf serum, penicillin/streptomycin, HEPES]), we separated the myelin and nerve debris from trigeminal neurons. All cell sorting experiments (See Neuron Sequencing) were carried out using a FACSAria Cell Sorter (BD Biosciences), and all flow cytometric analyses were carried out using an LSR II flow cytometer running FACSDiva 8.0 software (all BD Biosciences). Samples were run in F-12 serum-free media, and cell doublets, debris, and dead cells were excluded by fetal calf serum, SSC, and NeuO (NeuroFluor NeuO, Stemcell Technologies, Ex/Em: 468/557 nm) profiles. Data were analyzed by Kaluza (Beckman Coulter) software. To assess adrenergic differentiation and transdifferentiation by flow cytometry, cell suspensions were stained on ice with cell surface markers and transcription factors (see Antibodies and staining reagents). Briefly, following cell fixation and permeabilization, cells were stained with the primary antibodies according to the manufacturer's instructions (BD Biosciences). After exclusion of dead cells and non-neuronal cells (by NTIII labeling), TH, OCT3/4, SOX2, KLF4, MASH1, doublecortin, TBR1 and neurogenin2 fluorescence was measured by flow cytometry.
Instrument	BD FACSAria Cell Sorter and BD LSR II (BD Biosciences) were used in this study.
Software	BD FACS Diva Software Version 8.0.1 was used to collect the data. FlowJo Version 1.0.1 was used to analyze the data.
Cell population abundance	Cell number subjected to flow cytometry was limited due to availability of the cells from trigeminal ganglia.

Gating strategy

FSC/SSC were used to discern single cells from doublets/multiple cells. Samples without flourescent staining were used to establish boundaries between negative and positive cells.

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