|  |
| --- |
| **Key Resources Table** |
| **Reagent type (species) or resource** | **Designation** | **Source or reference** | **Identifiers** | **Additional information** |
| gene (M*us musculus*) | *Gap43* | www.ensembl.org | [ENSMUSG00000047261](http://www.ensembl.org/id/ENSMUSG00000047261) |   |
| gene (M*us musculus*) | *Fez1* | www.ensembl.org | [ENSMUSG00000032118](http://www.ensembl.org/id/ENSMUSG00000032118) |  |
| gene (M*us musculus*) | *Cxcr4* | www.ensembl.org | [ENSMUSG00000045382](http://www.ensembl.org/id/ENSMUSG00000045382) |  |
| gene (M*us musculus*) | *Nfib* | www.ensembl.org | [ENSMUSG00000008575](http://www.ensembl.org/id/ENSMUSG00000008575) |  |
| gene (M*us musculus*) | *Mapt* | www.ensembl.org | [ENSMUSG00000018411](http://www.ensembl.org/id/ENSMUSG00000018411) | Also known as Tau |
| gene (M*us musculus*) | *Tubb3* | www.ensembl.org | [ENSMUSG00000062380](http://www.ensembl.org/id/ENSMUSG00000062380) | Also known as Tuj1 |
| gene (M*us musculus*) | *Dclk1* | www.ensembl.org | [ENSMUSG00000027797](http://www.ensembl.org/id/ENSMUSG00000027797) |  |
| genetic reagent (M*us musculus*) | *Trp53flox, Rb1flox, p130flox,* and *R26mTmG* | Muzumdar et al., 2007; Schaffer et al., 2010; Denny et al., 2016 | RRID:MMRRC\_043692-UCD |  |
| genetic reagent (M*us musculus*) | NOD.Cg-PrkdcscidIl2rgtm1Wjl/SzJ (NSG) | The Jackson Laboratories | RRID:IMSR\_JAX:005557 |  |
| cell line (*Homo-sapiens*) | 293T | ATCC | CRL-11268 |   |
| cell line (*Homo-sapiens*) | NCI-H446 | ATCC | HTB-171 |   |
| cell line (*Homo-sapiens*) | NCI-H1694 | ATCC | CRL-5888 |  |
| cell line (*Homo-sapiens*) | NCI-H2081 | ATCC | CRL-5920 |  |
| cell line (*Homo-sapiens*) | NCI-H69 | ATCC | HTB-119 |  |
| cell line (*Homo-sapiens*) | NCI-H82 | ATCC | HTB-175 |  |
| biological sample (*Homo-sapiens*) |  Patient Derived Xenograft (PDX) LX102 | Leong et al.,  2014 |   |   |
| biological sample (*Homo-sapiens*) |  Patient Derived Xenograft (PDX) LU86 | Saunders et al., 2015 |  | A gift from Stemcentrx |
| biological sample (*Homo-sapiens*) |  Patient Derived Xenograft (PDX) LU102 | Saunders et al., 2015 |  | A gift from Stemcentrx |
| cell line (M*us musculus)* | KP22 | Denny et al., Cell. 2016 |  | Mouse primary cell line derived from *Rbf/f; Trp53f/f* |
| cell line (M*us musculus)* | 16T | Denny et al., Cell. 2016 |  | Mouse primary cell line derived from *Rbf/f; Trp53f/f* |
| cell line (M*us musculus)* | N2N1G | This paper. See Methods. This cell line was derived from a mouse SCLC tumor. |  | Mouse primary cell line derived from *Rbf/f; Trp53f/f; p130f/f* |
| cell line (M*us musculus)* | 6PF | This paper. See Methods. This cell line was derived from a mouse SCLC tumor. |  | Mouse primary cell line derived from *Rbf/f; Trp53f/f; p130f/f* |
| transfected construct (M*us musculus*) | Gap43 shRNA#1 | Sigma-Aldrich |  CTGTAGACGAAGCCAAACCTA |  Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Gap43 shRNA#2 | Sigma-Aldrich | GAGTCCACTTTCCTCTCTATT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Fez1 shRNA#1 | Sigma-Aldrich | GAGGACCTCGTGAATGAATTT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Fez1 shRNA#2 | Sigma-Aldrich | CGTGAATGAATTTGATGAGAA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Cxcr4 shRNA#1 | Sigma-Aldrich | ACTTCTGATAACTACTCTGAA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Cxcr4 shRNA#2 | Sigma-Aldrich | GTGTTTCAATTCCAGCATATA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | GFPshRNA | Sigma-Aldrich | GCAAGCTGACCCTGAAGTTCAT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Dclk1shRNA#1 | Sigma-Aldrich | GCCCTTTAAGAAGCTGGAGTA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Dclk1shRNA#2 | Sigma-Aldrich | GACCGCTACTTCAAAGGAATT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | DccshRNA#1 | Sigma-Aldrich | GCCAGCATAAGAACAGGAAAT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | DccshRNA#2 | Sigma-Aldrich | CCCAAGGATCTGACAGTCATT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Tiam1shRNA#1 |  Sigma-Aldrich | CGGAATTTGGTGTCGGATATT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Tiam1shRNA#2 | Sigma-Aldrich | GCCGCTGATAATTACGGGTTT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Dbn1shRNA#1 |  Sigma-Aldrich | GCAGTCTATCTTTGGTGACCA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Dbn1shRNA#2 | Sigma-Aldrich | CCCAGACCAGATTGTAGCTTA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | DcxshRNA#1 | Sigma-Aldrich | CGGCTGTAATTGGTGGTTGTA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | DcxshRNA#2 | Sigma-Aldrich | CGCGTGCTTCTCAACAAGAAA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Fscn1shRNA#1 | Sigma-Aldrich | CTACAATAAGGTGGCTCTCAA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Fscn1shRNA#2 | Sigma-Aldrich | CCGTTCCAGTTACGATGTCTT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Lrp8shRNA#1 | Sigma-Aldrich | CGCAGCAATCAGCAACTATGA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Lrp8shRNA#2 | Sigma-Aldrich | CCCATCTCTGATCTTCACGAA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Map1bshRNA#1 | Sigma-Aldrich | CCGAGTTAGACATCAAAGAT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | Map1bshRNA#2 | Sigma-Aldrich | CGGATTCAACATGCTCATCAA | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | RelnshRNA#1 | Sigma-Aldrich | CCGTGGAAATTGTGATCTGTT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | RelnshRNA#2 | Sigma-Aldrich | CCAGGATACATGATGCAATTT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | VldlrshRNA#1 | Sigma-Aldrich | CCGAGTCTGATCTTCACTAAT | Lentiviral construct to transfect and express the shRNA. |
| transfected construct (M*us musculus*) | VldlrshRNA#2 | Sigma-Aldrich | CGACGAGAAGAACTGTGTAAA | Lentiviral construct to transfect and express the shRNA. |
| antibody | Anti-mouse-Tuj1(Mouse monoclonal) | Biolegend |  801213RRID:AB\_2728521 | IHC/IF (1:500) |
| antibody | Anti-mouse-Tau(Rabbit polyclonal) | Dako | A0024RRID:AB\_10013724 | IHC/IF (1:1000) |
| antibody | Anti-mouse-Map2(Rabbit polyclonal) | EMD Millipore | AB5622RRID:AB\_91939 | IHC/IF (1:500) |
| antibody | Anti-GFP(Chicken polyclonal) | Abcam  | ab13970RRID:AB\_300798 | IHC/IF (1:500) |
| antibody | Anti-human/mouse-GAP43(Rabbit polyclonal) | Abcam  | ab16053RRID:AB\_443303 | IHC (1:500) |
| antibody | Anti-human/mouse-CGRP(Mouse monoclonal) | Sigma-Aldrich  | C7113RRID:AB\_259000 | IHC/IF (1:200) |
| antibody | Anti-human/mouse-UCHL1(Rabbit polyclonal) | Sigma-Aldrich | HPA005993RRID:AB\_1858560 | IHC/IF (1:500) |
| antibody | Anti-human/mouse-Fez1(Rabbit monoclonal) | Cell Signaling | 42480RRID:AB\_2799222 | WB (1:1000) |
| antibody | Anti-human/mouse-Hsp90(Mouse monoclonal) | BD Transduction Laboratories | 610418RRID:AB\_397798 | WB (1:1000) |
| antibody | secondary HRP-conjugated anti-mouse(Goat polyclonal) | Santa Cruz Biotechnology | sc-2005RRID:AB\_631736 | WB (1:2000) |
| antibody | secondary HRP-conjugated anti-rabbit(Goat polyclonal) | Santa Cruz Biotechnology | sc-2030RRID:AB\_631747 | WB (1:2000) |
| commercial assay or kit | Silicone inserts | ibidi  |  80209 |   |
| chemical compound, drug | DiIred fluorescent tracer | Thermo Fisher Scientific | D282 |  |
| software, algorithm | Graphpad Prism8 | Graphpad | Prism8 RRID:SCR\_002798 |  |
| software, algorithm | Metascape | Zhou et al., 2019  | metascape.orgRRID:SCR\_016620 |  |
| software, algorithm | Cancer Dependency Map Portal | Tsherniak et al., 2017 | [depmap.org/portal/](https://depmap.org/portal/) |  |
| other | Tissue microarraysLC818a | US Biomax | LC818a |  |
| other | Tissue microarrays/sections | This paper. See Methods. These samples were obtained from the Pathology department. | Human SCLC metastases sections from Stanford Hospital |  |