

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

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Технические характеристики на материалы для редактирования генов и функциональной геномики, инструменты генетического скрининга компании **Sigma-Aldrich**

Виды товаров: наборы инструментов для геномной инженерии, белки, одиночные клоны рнк, лентивирусные упаковочные смеси, контрольные плазмидные ДНК, люцифераза контрольная плазмидная ДНК, библиотеки sh-РНК для охвата генома, библиотеки массивов CRISPR полного генома Сэнгера, библиотеки CRISPR KO, объединенные в пул всего генома GeCKO , библиотеки CRISPR KO, объединенные в пул всего генома SIGMA, библиотеки нокаута ядовитых экзонов CRISPR человека, библиотеки нокаутов CRISPR человека Брунелло, библиотеки Бри CRISPR для мышей, объединенные библиотеки shRNA, библиотеки микроРНК, библиотеки полного генома и подпулов CRISPRi, человеческие библиотеки CRISPRi Дольчетто, человеческие CRISPRi 10x-совместимая библиотеки лекарств, объединенные скрининги на лентивирусы и др.

CRISPR & Gene Editing



THE ULTIMATE SUITE OF GENOME ENGINEERING TOOLS AND SERVICES

Advances in genome engineering are enabling researchers to achieve unprecedented breakthroughs, from curing genetic disorders to developing disease-resistant crops. Sigma-Aldrich® Advanced Genomics delivers complete support for every step of CRISPR-based gene editing research at any scale. Target a single gene using Zinc Finger Nucleases or screen a whole genome with fully customizable CRISPR products.

With over 350 years of technical leadership, Sigma-Aldrich® Advanced Genomics products come with expertise that extends Beyond the Bench - from discovery to therapeutic impact.

BEST IN CLASS CAS9 PROTEINS

Sigma-Aldrich® Advanced Genomics offers multiple Cas9 variants (wild-type, enhanced specificity, nickase, GFP-fused, catalytically inactive) and in several formats (plasmid, lentivirus, lyophilized protein). Choose from an industry leading selection of Cas9 proteins to meet your individual research needs.

GUARANTEED CRISPR GRNA

Every SygRNA® synthetic single guide RNA (sgRNA), crRNA and tracrRNA is synthesized using our proprietary process and reagents using the highest quality materials available. Editing activity is assured regardless of your target, cell type or application, and is backed by the most comprehensive guarantee in the industry.

CRISPR INHIBITION AND ACTIVATION (CRISPRi AND CRISPRa)

Gain even greater insights into complex biological networks using Sigma-Aldrich® Advanced Genomics CRISPR activation and CRISPR inhibition libraries for gene knockdown and overexpression experiments. Pooled CRISPRi and SAM CRISPRa lentiviral libraries are available off-the-shelf or customized to your specific needs.

- Learn more about **CRISPRi & CRISPRa Genetic Screening**

CRISPR SCREENING WITH 10X GENOMICS COMPATIBILITY

Sigma-Aldrich® Advanced Genomics offers the only 10x Genomics Certified Compatible lentiviral pools for CRISPR single-cell screening. Our optimized, custom lentiviral vectors are fully compatible with Chromium Single Cell Gene Expression v3 and v3.1 (Next GEM) solution utilizing Feature Barcode technology.

- Learn more about **10x Genomics Compatible products**.

WE'RE HERE TO HELP

Whether you need help designing your CRISPR experiment, require assistance troubleshooting, or simply want to better understand how you can apply gene editing methods in your research, Sigma-Aldrich® Advanced Genomics is here to guide you.

LVCAS9BST

CAS9 Blasticidin Lenti Particles



CAS9BST

CAS9 Blasticidin Lenti Plasmid



CAS9GEMP

Cas9 Geminin plasmid



CAS9HYGROVP

Cas9 Hygromycin Lenti Plasmid



CAS9HYGROV

Cas9 Hygromycin Lentiviral Particles



LVCAS9NEO

Cas9 Neomycin Lenti Particles



CAS9NEO

Cas9 Neomycin Lenti Plasmid



CAS9P

Cas9 plasmid



CAS9PROT

Cas9 Protein

from *Streptococcus pyogenes*, recombinant, expressed in *E. coli*, 1X NLS



CAS9D10APR

Cas9-D10A Nickase Protein

from *Streptococcus pyogenes* with D10A mutation, recombinant, expressed in *E. coli*, 1X NLS



CAS9GFPVP

Cas9-GFP Lenti Plasmid



CAS9GFPPRO

Cas9-GFP Protein

from *Streptococcus pyogenes*, fused with enhanced GFP, recombinant, expressed in *E. coli*, 3X NLS



CAS9RFPVP

Cas9-RFP Lenti Plasmid



CAS9GFPP

CMV-CAS9-2A-GFP Plasmid



CAS9RFPP

CMV-CAS9-2A-RFP Plasmid



CAS9D10AGFPP

CMV-CAS9D10A-2A-GFP Plasmid



CAS9D10ARFPP

CMV-CAS9D10A-2A-RFP Plasmid



CSTZFND

CompoZr™ Custom Zinc Finger Nuclease (ZFN)

ZFN plasmid only



CTI1

CompoZr® Targeted Integration Kit - AAVS1

Transgene Integration in the Human Genome



CTIM

CompoZr® Targeted Integration Kit - mRosa26

Transgene Integration in the Mouse Genome

CZFA1041

CompoZr® ZFA Targeting c-MYC



CZFA1504

CompoZr® ZFA Targeting Human KLF4



CZFA17184

CompoZr® ZFA Targeting Human OCT4



CZFA2136

CompoZr® ZFA Targeting Human SOX2



CAS9D10AMRNA

CRISPR Cas9-D10A Nickase mRNA



CAS9D10AP

CRISPR Cas9-D10A Nickase Plasmid



CRISPRPLO2

CRISPR GUS GAPDH Reporter Control for Dicots



CRISPRPLO1

CRISPR GUS GAPDH Reporter Control for Monocots



HSOLIGOINT

CRISPR Integration Kit



CRISPRPL

CRISPR Plant



DCAS9PROT

dCas9-3XFLAG™-Biotin Protein

from *Streptococcus pyogenes* with D10A and H840A mutations, recombinant, expressed in *E. coli*, 1X NLS



DCAS9P

Dead Cas9 plasmid



ESPCAS9PRO

eSpCas9 Protein

from *Streptococcus pyogenes* with mutations conferring enhanced specificity, recombinant, expressed in *E. coli*, 1X NLS



ESPCAS9BST

eSpCas9-Blasticidin Lenti Plasmid



ECAS9GFPPR

eSpCas9-GFP Protein

from *Streptococcus pyogenes* with mutations conferring enhanced specificity, fused with enhanced GFP, recombinant, expressed in *E. coli*, 3X NLS



FNCAS9P

FnCas9 plasmid



FNCAS9PROT

FnCas9 Protein

from *Francisella novicida*, recombinant, expressed in *E. coli*, 1X NLS



DCAS9P300

Sigma CRISPR dCas9-p300 Activator Expression Plasmid



DCAS9P300VP

Sigma CRISPR dCAS9-p300V Activator Lenti Plasmid



TRACRRNAMOD

SygrRNA™ Cas9 Synthetic Modified tracrRNA

FNCAS9TRACR

SygrRNA™ FnCas9 Synthetic tracrRNA



SITRAN-RO

X-tremeGENE™ siRNA Transfection Reagent

Polymer reagent for delivering siRNA to common cell lines

RNAi Single Clones



MISSION® SHRNA CLONES FOR OPTIMAL GENE KNOCKDOWN

Long term, stable gene silencing distinguishes short hairpin RNA constructs (shRNA) from other RNAi and CRISPR tools and can offer distinct advantages over knockout gene experiments. Sigma-Aldrich® Advanced Genomics, in collaboration with the Broad Institute's RNAi consortium (TRC) scientists, have generated the most comprehensive and validated series of vectors and clones for your RNAi experiments. Take advantage of our world-class expertise in high-throughput lentiviral manufacturing and DNA purification services, which can save you time and resources. Flexible customization offerings ensure all your experimental needs are met and offers unparalleled gene coverage.

With over 350 years of technical leadership, Sigma-Aldrich® Advanced Genomics products come with expertise that extends Beyond the Bench—from discovery to therapeutic impact.

EXPERT GENE KNOCKDOWN YOU CAN COUNT ON

As the exclusive provider of the trusted TRC1.5 and TRC2 collections, our comprehensive **MISSION® shRNA product offering** consists of almost 200,000 pre-cloned shRNA constructs targeting more than 20,000 human and mouse genes. Easily **search by your gene of interest**, view validation data, and order in a few simple clicks. shRNA clones are **available in lentivirus, plasmid DNA, or bacterial stocks**.

Each gene is represented by multiple vector constructs targeting different regions of the gene sequence. Every shRNA is cloned into the **pLKO.1 lentiviral vector**, and is sequence verified to ensure a match to the target gene. Sigma-Aldrich® Advanced Genomics offers the most trusted and comprehensive shRNA screening portfolio for even the most difficult targets and cell lines.

RNAI SCREENING FOR GENOME-WIDE KNOCKDOWN

Functional genomics screens are an integral part of discovery research, allowing scientists to unravel the mechanisms underlying biological systems, pathways, and diseases. Effective interrogation of these complex molecular interaction networks requires shRNA libraries that deliver reliable, efficient, and long-term knockdown. Need more info on **gene family sets** or libraries? **Contact Us**.

SHRNA VECTORS & CONTROLS

Optimized experimental designs start with the right vector and controls. Shop our comprehensive offering of vector options and positive and negative controls for TRC1.5 and TRC2 available in plasmid DNA or lentiviral transduction particles. **Learn more about MISSION® shRNA controls. Learn more about MISSION® vectors.**

CUSTOM CLONING

Whether you need a vector with a fluorophore tag, alternate promoters, or higher viral titers, our collection has you covered. Our primary backbones are the TRC-designed pLKO.1-puro and TRC2-pLKO.5-puro vectors. These vectors can be adapted to meet your needs for any experiment.

Have a custom project you want to discuss? **Connect with a Sigma-Aldrich® Advanced Genomics Expert.**

MISSION® SHRNA KNOCKDOWN GUARANTEE

Sigma-Aldrich® shRNA is guaranteed that upon purchase of the defined lentiviral clone set quantity on the shRNA product page for your gene of interest (this varies, but is typically 5 clones), at least one of those lentiviral clones for a gene should yield greater than 70% knockdown.

This guarantee does not apply to transient transfections with DNA. Proper controls and conditions are required to go along with supporting data showing ineffective knock-down for the guarantee to apply. Appropriate supporting data would include quantitative PCR-based silencing data, comparing target mRNA levels of an appropriate positive control shRNA to an appropriate negative control shRNA, demonstrating knockdown of the target mRNA greater than or equal to 70%. Due to the variability of antibodies and protein half-lives, we are unable to accept protein-based detection methods. In the case that there are no more shRNA for that gene target, or all shRNA fail to knock down the target gene by 70% or more, we will refund the price for the clone set quantity.

WE'RE HERE TO HELP

Whether you need help designing your experiment, need a custom vector, high viral titer, require assistance troubleshooting, or simply want to better understand how you can apply shRNA gene silencing in your research, Sigma-Aldrich® Advanced Genomics is here to guide you. **Connect with a Sigma-Aldrich® Advanced Genomics Expert**

SHP002

CRISPR & MISSION® Lentiviral Packaging Mix



SHC312

MISSION® 1X LacO Inducible Non-Target shRNA Control Plasmid DNA

Does not target any known genes



SHC312V

MISSION® 1X LacO Inducible Non-Target shRNA Control Transduction Particles

Does not target any known genes



SHC332

MISSION® 3X LacO Inducible Non-Target shRNA Control Plasmid DNA

Does not target any known genes



SHC332V

MISSION® 3X LacO Inducible Non-Target shRNA Control Transduction Particles

Does not target any known genes



SHM05

MISSION® ExpressMag® 96-Well Magnet

Increases transduction efficiency



SHM04

MISSION® ExpressMag® Super Magnetic Plate

Increases transduction efficiency



SHP001

MISSION® Lentiviral Packaging Mix

Production of replication incompetent viral particles



SHC005

MISSION® pLKO.1-puro eGFP shRNA Control Plasmid DNA

shRNA sequence targeting eGFP



SHC001

MISSION® pLKO.1-puro Empty Vector Control Plasmid DNA

Contains no shRNA insert



SHC001V

MISSION® pLKO.1-puro Empty Vector Control Transduction Particles

Contains no shRNA insert



SHC001H

MISSION® pLKO.1-puro Empty Vector Control Transduction Particles, High Titer

Contains no shRNA insert



SHC007

MISSION® pLKO.1-puro Luciferase shRNA Control Plasmid DNA

shRNA sequence targeting luciferase



SHC002

MISSION® pLKO.1-puro Non-Mammalian shRNA Control Plasmid DNA

Targets no known mammalian genes



SHC002V

MISSION® pLKO.1-puro Non-Mammalian shRNA Control Transduction Particles

Targets no known mammalian genes



SHC002H

MISSION® pLKO.1-puro Non-Mammalian shRNA Control Transduction Particles, High Titer

Targets no known mammalian genes



SHC016

MISSION® pLKO.1-puro Non-Target shRNA Control Plasmid DNA

Targets no known genes from any species



SHC016V

MISSION® pLKO.1-puro Non-Target shRNA Control Transduction Particles

Targets no known genes from any species



SHC004

MISSION® pLKO.1-puro TurboGFP™ shRNA Control Plasmid DNA

shRNA sequence targeting tGFP



SHC012

MISSION® pLKO.1-puro-CMV-TagRFP™ Positive Control Plasmid DNA

Contains a gene encoding TagRFP

SHC003

MISSION® pLKO.1-puro-CMV-TurboGFP™ Positive Control Plasmid DNA

Green fluorescent protein marker to monitor transduction efficiency



SHC003V

MISSION® pLKO.1-puro-CMV-TurboGFP™ Positive Control Transduction Particles

Green fluorescent protein marker to monitor transduction efficiency



SHC003H

MISSION® pLKO.1-puro-CMV-TurboGFP™ Positive Control Transduction Particles, High Titer

TurboGFP™, High Titer, Green fluorescent protein marker to monitor transduction efficiency



SHC014

MISSION® pLKO.1-puro-UbC-TurboGFP™ Positive Control Plasmid DNA

Contains a gene encoding TurboGFP, under the control of the UbC promoter



SHC014V

MISSION® pLKO.1-puro-UbC-TurboGFP™ Positive Control Transduction Particles

Contains a gene encoding TurboGFP, under the control of the UbC promoter



SHCLNV

MISSION® shRNA

Lentiviral Particles



CSTVRS

MISSION® shRNA

Custom Lentiviral Particles



SHC201

MISSION® TRC2 pLKO.5-puro Empty Vector Control Plasmid DNA

Contains no shRNA insert



SHC201V

MISSION® TRC2 pLKO.5-puro Empty Vector Control Transduction Particles puro

Contains no shRNA insert



SHC202

MISSION® TRC2 pLKO.5-puro Non-Mammalian shRNA Control Plasmid DNA

Targets no known mammalian genes



SHC216

MISSION® TRC2 pLKO.5-puro Non-Target shRNA Control Plasmid DNA

Targets no known genes from any species



SHC216V

MISSION® TRC2 pLKO.5-puro Non-Target shRNA Control Transduction Particles

Targets no known genes from any species



SHC204

MISSION® TRC2 pLKO.5-puro TurboGFP™ shRNA Control Plasmid DNA

shRNA sequence targeting tGFP



SHC204V

MISSION® TRC2 pLKO.5-puro TurboGFP™ shRNA Control Transduction Particles

shRNA sequence targeting tGFP



SHC203

MISSION® TRC2 pLKO.5-puro-CMV-TurboGFP™ Positive Control Plasmid DNA

Green fluorescent protein marker to monitor transduction efficiency

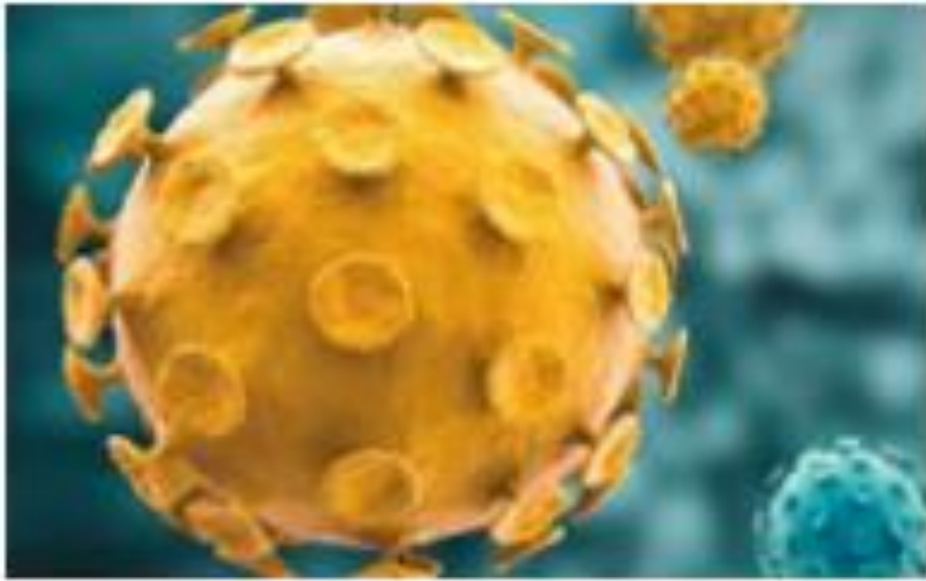


SHC203V

MISSION® TRC2 pLKO.5-puro-CMV-TurboGFP™ Positive Control Transduction Particles

Green fluorescent protein marker to monitor transduction efficiency

RNAi Libraries



SHRNA LIBRARIES FOR UNPARALLELED GENOMIC COVERAGE

Sigma-Aldrich® Advanced Genomics is the exclusive provider of the TRC1.5 and TRC2 collections from The RNAi Consortium (TRC). These lentivirus-based shRNA libraries deliver unparalleled coverage and are available in multiple formats that include whole-genome, individual RNAi clones/vectors, and gene family sets. Available in standard glycerol format or higher quality DNA and lentiviral formats.

With over 350 years of technical leadership, Sigma-Aldrich® Advanced Genomics products come with expertise that extends Beyond the Bench—from discovery to therapeutic impact.

POWERFUL GENE MODULATION TO ILLUMINATE GENETIC PATHWAYS

Functional genomics screens are an integral part of discovery research, allowing you to unravel the mechanisms that belie biological systems, pathways, and diseases. Effective interrogation of these complex molecular interaction networks requires shRNA libraries that deliver reliable, efficient, and long-term knockdown.

Sigma-Aldrich® Advanced Genomics offers the most trusted and comprehensive shRNA screening portfolio for even the most demanding functional genomics screens. For more focused screening, the MISSION® shRNA gene family sets are collections of genes related to specific cellular/molecular pathways highly cited in the literature. Our Bioinformatics team has methodically mapped all TRC shRNA clones to each set. Gene family sets are fully customizable, allowing for complete flexibility to add or delete clone or gene content. Additionally, any panel can be arrayed in either 96 or 384-well plate formats. All gene family sets can be used at the benchtop for focused target discovery and pathway analysis.

THE LARGEST AND MOST VALIDATED SHRNA COLLECTION FROM THE RNAI CONSORTIUM (TRC)

Our unique screening formats leverage the discovery potential of the trusted and proven TRC shRNA collection. When you partner with us, you gain access to our world-class lentiviral production expertise and the formats you require for systematic or pooled RNAi screening on any scale. From the LentiPlex® pooled whole genome lentiviral shRNA library to your own custom designs or individual clones, we offer the complete spectrum of shRNA tools to get you started screening today.

TRC PLKO LENTIVIRAL VECTORS AND CONTROLS

Whether you need controls for color, alternate promoters, or higher titers, our collection has you covered. Our primary backbones are the TRC-designed pLKO.1-puro and TRC2-pLKO.5-puro vectors. These vectors can be adapted to meet your needs for any experiment.

SHRNA CUSTOM CLONING, LENTIVIRAL MANUFACTURING AND DNA PURIFICATION SERVICES

We offer a variety of custom RNAi products, including:

- Generation of customized gene sets
- High-throughput DNA purification
- Deconvolution of complex shRNA pools
- Variety of custom cloning options available
- High-throughput lentiviral manufacturing
- Large scale viral manufacturing from 1 mL to liters, as well as customized viral packaging
- Concentrated viral preparations up to 10^9 VP/mL
- Functional titer assays available - FACS or CFU

Have a custom project you want to discuss? **Connect with a Sigma-Aldrich® Advanced Genomics Expert.**

POOLED SCREENING DECONVOLUTION SERVICES

We can help you to identify your hits from your pooled shRNA screens using next-generation sequencing. Our expertise with TRC1, TRC1.5 and TRC2 libraries means you don't have to worry about shRNA pool deconvolution. Using a simultaneous sequencing method, we'll provide your data in an easy-to-analyze format that allows you to focus on results.

MISSION® SHRNA KNOCKDOWN GUARANTEE

Sigma-Aldrich® shRNA is guaranteed that upon purchase of the defined lentiviral clone set quantity on the shRNA product page for your gene of interest (this varies, but is typically 5 clones), that at least one of those lentiviral clones for a gene should yield greater than 70% knockdown.

WE'RE HERE TO HELP

Whether you need help designing your RNAi experiment, require assistance troubleshooting, or simply want to better understand how lentiviral screening can enhance your research, Sigma-Aldrich® Advanced Genomics is here to guide you. **Connect with a Sigma-Aldrich® Advanced Genomics Expert.**

SHPH01

MISSION® LentiPlex® Human Pooled shRNA Library

For Rapid, Convenient Genome-wide shRNA Screens



SHPHLIBR

MISSION® LentiPlex® Complete Human Pooled shRNA Library

For Rapid, Convenient Genome-wide shRNA Screens



SHPM01

MISSION® LentiPlex® Mouse Pooled shRNA Library

For Rapid, Convenient Genome-wide shRNA Screens



SH1121

MISSION® shRNA Human Gene Family Set, DNA

Nuclear Hormone Receptors



SHPH2

MISSION® LentiPlex® Human Pooled shRNA Library TRC2

For Rapid, Convenient Genome-wide shRNA Screens



SHPM2

MISSION® LentiPlex® Mouse Pooled shRNA Library TRC2

For Rapid, Convenient Genome-wide shRNA Screens



SHPMLIBR

MISSION® LentiPlex® Complete Mouse Pooled shRNA Library

For Rapid, Convenient Genome-wide shRNA Screens



SHPM15

MISSION® LentiPlex® Mouse Pooled shRNA Library TRC1.5

For Rapid, Convenient Genome-wide shRNA Screens

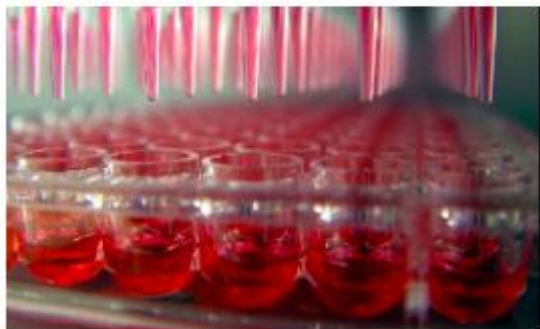


SHPH15

MISSION® LentiPlex® Human Pooled shRNA Library TRC1.5

For Rapid, Convenient Genome-wide shRNA Screens

Genetic Screening



SCREENING TOOLS AT THE SCALE TO MEET YOUR GOALS.

Functional genomics screens offer unique insight into the complex genetic pathways underlying drug resistance and disease but designing a screening experiment can feel daunting. With unmatched experience in lentivirus and the largest portfolio of screening products on the market, Sigma-Aldrich® Advanced Genomics will help ensure you have all the right tools to meet your research goals.

With over 350 years of technical leadership, Sigma-Aldrich® Advanced Genomics products come with expertise that extends Beyond the Bench—from discovery to therapeutic impact.

POWERFUL SCREENING TOOLS FOR ALL YOUR NEEDS

The Sigma-Aldrich® Advanced Genomics screening portfolio has been designed to provide you with a complete range of tools to enable your target discovery. Our functional genomics screens were developed with trusted partners including The Broad Institute, UCSF, The Wellcome Trust Sanger Institute and 10x Genomics.

Whether you're looking at gene knockout, investigating loss-of-function, gain-of-function, or using a combination of gene perturbation methods, our superior range of functional genomics and gene modulation screens can be used for even the most difficult targets.

- [Download your CRISPR Screening infographic](#)

[Connect with an Expert](#)

GENE KNOCKOUT SCREENS

Investigate the whole genome, or customize to interrogate the gene families of your choice with our trusted pooled CRISPR knockout screens and our exclusive Sanger arrayed KO screen:

- [Sanger Whole Genome CRISPR Arrayed Libraries](#)
- [GeCKO Whole Genome Pooled CRISPR KO Libraries](#)

- **SIGMA Whole Genome Pooled CRISPR KO Libraries**
- **Human CRISPR Poison Exon Knockout Library**
- **Human CRISPR Brunello Knockout Library**
- **Human CRISPR Toronto Knockout Library V3**
- **Mouse CRISPR Brie Library**

GENE INHIBITION/KNOCKDOWN SCREENS

The MISSION® shRNA Library includes comprises the TRC1, and exclusive TRC1.5 and TRC2 collections to provide unparalleled gene coverage. Developed using UCSF designs, our whole genome CRISPRi libraries are also available as off-the shelf subpools and with 10x Genomics Feature Barcoding for single cell discovery:

- **TRC LentiPlex® Pooled shRNA Libraries**
- **TRC LentiElite™ Arrayed shRNA Libraries**
- **CRISPRi Whole Genome and Subpool Libraries**
- **Human CRISPRi Dolcetto Library**
- **Human CRISPRi 10x Compatible Druggable Library**

GENE ACTIVATION/OVEREXPRESSION SCREENS

Our SAM CRISPRa libraries and pools, developed by the Broad Institute, have demonstrated superior activation particularly for difficult-to-express targets. Our ORF screens are available in both pooled and arrayed formats and with puromycin selection:

- **SAM CRISPRa Pooled Libraries**
- **Human CRISPRa Calabrese Library**
- **Mouse CRISPRa Caprano Library**
- **MISSION® TRC3 ORF Whole Genome Arrayed Libraries**
- **MISSION® TRC3 ORF Whole Genome Pooled Libraries**

READY-TO-USE CUSTOM LENTIVIRAL SCREENS

Preparing lentivirus can be tricky, let us to do the hard work for you. Our expert lentiviral manufacturing capabilities also enable you to select specific vector options optimized for your experiment.

- **Lentiviral Pooled Screens**

SINGLE CELL ANALYSIS & DECONVOLUTION

Identify hits from your pooled screens using our deconvolution services, or track your gene perturbations at single cell resolution using our 10x Genomics certified compatible products:

10X Genomics Compatible Products for Single Cell Analysis

Deconvolution Services

CRISPRi10X

10X CRISPRi Feature Barcode Optimization Kit



CRISPR17

CRISPR Activator Human Oct4 Positive Control Plasmid

gRNA Only Expression Plasmid



CRISPR01

CRISPR Human EMX1 Positive Control



SHP002

CRISPR & MISSION® Lentiviral Packaging Mix



CRISPR02

CRISPR Nickase EMX1 Positive Control



CRISPR06

CRISPR UNIVERSAL NEGATIVE CONTROL 1



CRISPR07

CRISPR UNIVERSAL NEGATIVE CONTROL 2



CRISPR08

CRISPR UNIVERSAL NEGATIVE CONTROL 3



CRISPR13

CRISPR-Lenti Human HPRT1 Positive Control DNA



CRISPR13H

CRISPR-Lenti Human HPRT1 Positive Control High Titer Transduction Particles



CRISPR13V

CRISPR-Lenti Human HPRT1 Positive Control Transduction Particles



CRISPR11

CRISPR-Lenti Human Positive Control DNA



CRISPR12

CRISPR-Lenti Non-Targeting Control Plasmid



CRISPR12V

CRISPR-Lenti Non-Targeting Control Transduction Particles



SAMVP64BSTV

dCas9-VP64-Blasticidin SAM CRISPRa Helper Construct 1 Lentiviral Transduction Particles



SAMVP64BST

dCas9-VP64-Blasticidin SAM CRISPRa Helper Construct 1 Plasmid DNA



HGECKO2A

Gecko2 Human Whole Genome CRISPR Pool, All-in-one™ Lenti Particles (Gecko2 vector)



HGECKO2G

Gecko2 Human Whole Genome CRISPR Pool, gRNA Only Lenti Particles (Gecko2 vector)



MGECKO2A

Gecko2 Mouse Whole Genome CRISPR Pool, All-in-One™ Lenti Particles (Gecko2 vector)



MGECKO2G

Gecko2 Mouse Whole Genome CRISPR Pool, gRNA Only Lenti Particles (Gecko2 vector)

CRISPRIS02

Human CRISPRi Cancer Apoptosis Kit



CRISPRIS10

Human CRISPRi Common Cancer Cell Lines Kit



CRISPRICON

Human CRISPRi Control and Effector Kit



CRISPRIS05

Human CRISPRi Gene Expression Kit



CRISPRIS08

Human CRISPRi iPSC and Common Cancer Cell Lines Kit



CRISPRIS09

Human CRISPRi iPSC Kit



CRISPRIS01

Human CRISPRi Kinase Phosphatase Drug Targets Kit



CRISPRIS06

Human CRISPRi Membrane Proteins Kit



CRISPRIS04

Human CRISPRi Mitochondria Trafficking Motility Kit



CRISPRIS03

Human CRISPRi Stress Proteostasis Kit



CRISPRIS07

Human CRISPRi Unassigned Kit



CRISPRILIB

Human Whole Genome and Long Non Coding CRISPRi Library Kit



HSAMPURO

Human Whole Genome SAM CRISPRa Pooled Lentiviral Library Kit Puro



HSAMZEO

Human Whole Genome SAM CRISPRa Pooled Lentiviral Library Kit Zeo



CRISPR18

Lenti CRISPR Universal Non-Target Control#1 Plasmid DNA (LV04 vector)



SHC312

MISSION® 1X LacO Inducible Non-Target shRNA Control Plasmid DNA

Does not target any known genes



SHC312V

MISSION® 1X LacO Inducible Non-Target shRNA Control Transduction Particles

Does not target any known genes



SHC332

MISSION® 3X LacO Inducible Non-Target shRNA Control Plasmid DNA

Does not target any known genes



SHC332V

MISSION® 3X LacO Inducible Non-Target shRNA Control Transduction Particles

Does not target any known genes



SHM05

MISSION® ExpressMag® 96-Well Magnet

Increases transduction efficiency

SHM04

MISSION® ExpressMag® Super Magnetic Plate

Increases transduction efficiency



SHPHLIBR

MISSION® LentiPlex® Complete Human Pooled shRNA Library

For Rapid, Convenient Genome-wide shRNA Screens



SHPMLIBR

MISSION® LentiPlex® Complete Mouse Pooled shRNA Library

For Rapid, Convenient Genome-wide shRNA Screens



SHPH01

MISSION® LentiPlex® Human Pooled shRNA Library

For Rapid, Convenient Genome-wide shRNA Screens



SHPH15

MISSION® LentiPlex® Human Pooled shRNA Library TRC1.5

For Rapid, Convenient Genome-wide shRNA Screens



SHPH2

MISSION® LentiPlex® Human Pooled shRNA Library TRC2

For Rapid, Convenient Genome-wide shRNA Screens



SHPM01

MISSION® LentiPlex® Mouse Pooled shRNA Library

For Rapid, Convenient Genome-wide shRNA Screens



SHPM15

MISSION® LentiPlex® Mouse Pooled shRNA Library TRC1.5

For Rapid, Convenient Genome-wide shRNA Screens



SHPM2

MISSION® LentiPlex® Mouse Pooled shRNA Library TRC2

For Rapid, Convenient Genome-wide shRNA Screens



SHP001

MISSION® Lentiviral Packaging Mix

Production of replication incompetent viral particles



SHC005

MISSION® pLKO.1-puro eGFP shRNA Control Plasmid DNA

shRNA sequence targeting eGFP



SHC001

MISSION® pLKO.1-puro Empty Vector Control Plasmid DNA

Contains no shRNA insert



SHC001V

MISSION® pLKO.1-puro Empty Vector Control Transduction Particles

Contains no shRNA insert



SHC001H

MISSION® pLKO.1-puro Empty Vector Control Transduction Particles, High Titer

Contains no shRNA insert



SHC007

MISSION® pLKO.1-puro Luciferase shRNA Control Plasmid DNA

shRNA sequence targeting luciferase



SHC002

MISSION® pLKO.1-puro Non-Mammalian shRNA Control Plasmid DNA

Targets no known mammalian genes



SHC002V

MISSION® pLKO.1-puro Non-Mammalian shRNA Control Transduction Particles

Targets no known mammalian genes



SHC002H

MISSION® pLKO.1-puro Non-Mammalian shRNA Control Transduction Particles, High Titer

Targets no known mammalian genes



SHC016

MISSION® pLKO.1-puro Non-Target shRNA Control Plasmid DNA

Targets no known genes from any species



SHC016V

MISSION® pLKO.1-puro Non-Target shRNA Control Transduction Particles

Targets no known genes from any species

SHC004

MISSION® pLKO.1-puro TurboGFP™ shRNA Control Plasmid DNA

shRNA sequence targeting tGFP



SHC012

MISSION® pLKO.1-puro-CMV-TagRFP™ Positive Control Plasmid DNA

Contains a gene encoding TagRFP



SHC003

MISSION® pLKO.1-puro-CMV-TurboGFP™ Positive Control Plasmid DNA

Green fluorescent protein marker to monitor transduction efficiency



SHC003V

MISSION® pLKO.1-puro-CMV-TurboGFP™ Positive Control Transduction Particles

Green fluorescent protein marker to monitor transduction efficiency



SHC003H

MISSION® pLKO.1-puro-CMV-TurboGFP™ Positive Control Transduction Particles, High Titer

TurboGFP™, High Titer, Green fluorescent protein marker to monitor transduction efficiency



SHC014

MISSION® pLKO.1-puro-UbC-TurboGFP™ Positive Control Plasmid DNA

Contains a gene encoding TurboGFP, under the control of the UbC promoter



SHC014V

MISSION® pLKO.1-puro-UbC-TurboGFP™ Positive Control Transduction Particles

Contains a gene encoding TurboGFP, under the control of the UbC promoter



SHCLNV

MISSION® shRNA

Lentiviral Particles



CSTVRS

MISSION® shRNA

Custom Lentiviral Particles



SH1121

MISSION® shRNA Human Gene Family Set, DNA

Nuclear Hormone Receptors



MREH01

MISSION® Target ID Library



SHC201

MISSION® TRC2 pLKO.5-puro Empty Vector Control Plasmid DNA

Contains no shRNA insert



SHC201V

MISSION® TRC2 pLKO.5-puro Empty Vector Control Transduction Particles puro

Contains no shRNA insert



SHC202

MISSION® TRC2 pLKO.5-puro Non-Mammalian shRNA Control Plasmid DNA

Targets no known mammalian genes



SHC216

MISSION® TRC2 pLKO.5-puro Non-Target shRNA Control Plasmid DNA

Targets no known genes from any species



SHC216V

MISSION® TRC2 pLKO.5-puro Non-Target shRNA Control Transduction Particles

Targets no known genes from any species



SHC204

MISSION® TRC2 pLKO.5-puro TurboGFP™ shRNA Control Plasmid DNA

shRNA sequence targeting tGFP



SHC204V

MISSION® TRC2 pLKO.5-puro TurboGFP™ shRNA Control Transduction Particles

shRNA sequence targeting tGFP



SHC203

MISSION® TRC2 pLKO.5-puro-CMV-TurboGFP™ Positive Control Plasmid DNA

Green fluorescent protein marker to monitor transduction efficiency



SHC203V

MISSION® TRC2 pLKO.5-puro-CMV-TurboGFP™ Positive Control Transduction Particles

Green fluorescent protein marker to monitor transduction efficiency

ORFBFP

MISSION® TRC3 ORF BFP DNA Control



ORFBFPV

MISSION® TRC3 ORF BFP Lentivirus Control



ORFGFP

MISSION® TRC3 ORF GFP DNA Control



ORFGFPV

MISSION® TRC3 ORF GFP Lentivirus Control



MSAMPURO

Mouse Whole Genome SAM CRISPRa Pooled Lentiviral Library Kit Puro



MSAMZEO

Mouse Whole Genome SAM CRISPRa Pooled Lentiviral Library Kit Zeo



SAMMS2HYGV

MS2-P65-HSF1-Hygromycin SAM CRISPRa Helper Construct 2 Lentiviral Transduction Particles



SAMMS2HYG

MS2-P65-HSF1-Hygromycin SAM CRISPRa Helper Construct 2 Plasmid DNA



SAMHELPERV

SAM CRISPRa Helper Construct Kit Lentiviral Transduction Particles



SAMHELPERP

SAM CRISPRa Helper Construct Kit Plasmid DNA



HWGCRISPR

Sigma Whole Human Genome Lentiviral CRISPR Pool

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37

Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Саранск (8342)22-96-24
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97

Тверь (4822)63-31-35
Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

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