

Principal Area of Research or Work

Administration
Biochemistry
Bioengineering
Bioinformatics
Cell Biology
Diagnostics/Pathology
Drug Discovery
Genomics/Genetics
Immunology
Marketing/Sales
Microbiology/Virology
Molecular Biology
Neuroscience
Pharmacology/Toxicology
Proteomics
Purchasing
Other (please specify)

Which best describes your purchasing authority?

Authorize
Recommend
Evaluate
None of the Above

What techniques or technologies do you use in your lab? (Check all that apply)

Capillary Electrophoresis
Gene Transfer
Transfection
Real-time PCR
Nucleic Acid Labeling and Detection
Protein Sequence Analysis
RNA Isolation & Purification
Mass Spectrometry
Recombinant Protein Expression
Chromatography
Nucleic Acid Synthesizers
Microarray Analysis
Robotics/Automation
DNA Isolation & Purification

Gene Targeting
Electrophoresis
Vector Design/Construction
Laser Capture Microdissection
Mutagenesis
Nucleic Acid Hybridization
Gene Expression Analysis
Nucleic Acid Sequence Analysis
High-Throughput Screening
PCR/RT-PCR
Protein Isolation & Purification
Protein Microarrays
Protein Crystallization
Protein-DNA interaction Analysis
Protein-Protein Interaction Analysis
Cell/Tissue Culture
SNP Analysis
DNA Microarrays
Image Analysis
RNAi
Microscopy
Spectroscopy
Antibody-Based Technologies
2D Electrophoresis
Other (please specify)

Are you planning to start a new lab?

Yes: within 0-3 months
Yes: within 3-6 months
Yes: within 6-9 months
Yes: Within 9-12 months
Yes: >12 months
No

Which of the following equipment/systems do you plan to purchase in the next 3-6 months?

Fume hoods
Microfluidics equipment
Nucleic Acid Synthesizers
Mass Spectrometers
HTS Plate Handling/Storage

Hybridization Ovens
Incubators
Autoclave/Sterilizers
Nucleic Acid Sequencers
DNA Array Equipment
HPLC/FPLC Systems
Gel Electrophoresis Systems
Water Purification Systems
Imaging/Gel Documentation Systems
Spectrophotometers
Flow Cytometers
HTS Workstations
Microscopes
Peptide Synthesizers
Clean Room Equipment
Heating Blocks
Centrifuges
Real Time Thermal Cyclers
Balances
Thermal Cyclers
Tissue Culture Hoods
Water Baths
2D Electrophoresis Systems
Cell Analyzers

Please characterize your RNAi research

I am currently involved in RNAi research
I plan to begin RNAi experiments within 3 months
I plan to begin RNAi experiments within 6 months
I plan to begin RNAi experiments within 12 months
I do not work with RNAi

What is the goal of your RNAi research?

Therapeutics
Drug development
Target identification
Target validation
Functional genomics
Basic research
Kit development
Other (please specify)

Which of the following reagents, kits and services do you use in your lab? (Check all that apply)

Custom/pre-designed siRNA synthesis – single tubes
Custom/pre-designed siRNA synthesis – 96-well plates
Transfection optimization kits
siRNA/antibody "starter" or optimization kits
siRNA localization/siRNA labeling kits
Kits for preparing individual siRNAs by in vitro transcription
Kits for preparing siRNA populations by Dicer or RNase III digestion
siRNA Expression Vectors – plasmid
siRNA Expression Vectors – viral
siRNA Expression Template Kits – PCR based
Morpholinos for gene knockdown
Electroporation buffers or kits

What do you use starter kits for?

Optimize siRNA conditions
Validate controls for current experiments
Do not use
Other (please specify)

Which supplier(s) of siRNA starter kits do you use? (Check all that apply)

Dharmacon, Inc.
Upstate
None of the above/Other (please specify)

How do you generate your siRNA?

in vitro transcription
Dicer/RNase III
Expression in cells from a siRNA expression plasmid or viral vector
Expression in cells from a PCR-derived siRNA expression cassette
Synthetic, from a commercial supplier
Synthetic, made in house

Which supplier(s) of siRNA construction kits do you use? (Check all that apply)

Invitrogen
IMGENEX
Ambion
NEB

Promega
None of the above/Other (please specify)

Which supplier(s) of siRNA oligos do you use? (Check all that apply)

Ambion
Bioneer
Integrated DNA Technologies
Dharmacon
QIAGEN
Sequitur
Thermo Electron
Proligo
Eurogentec
None of the above/Other (please specify)

What is the most important feature in siRNA oligos?

Cost
Purity
Quality documented by mass spec
Ready to use (ie, no desalting, deprotecting, or annealing)
Low level of toxicity
Silencing effectiveness

How do you prefer to buy your siRNA oligos? (Check all that apply)

duplexed
single-stranded
with modifications
96-well plate
24-well plate
single tube
ready to use
do not buy

Would it be helpful to have an antibody sold with each siRNA that is specific to the gene being silenced?

Yes
No

Which of the following supplier's software do you use to design your siRNA oligos? (Check all that apply)

- Promega
- Mirus Biotech
- Imgenex
- Qiagen
- Ambion
- Invivogen
- Dharmacon
- GenScript
- Sequitur
- None of the Above/Other (please specify)

Which supplier(s) of siRNA expression vectors do you use? (Check all that apply)

- Ambion
- BD Biosciences (Clontech)
- IMGENEX
- Invitrogen
- Promega
- Stratagene
- OligoEngine
- InvivoGen
- Genscript
- Gene Therapy Systems
- I use a vector developed in my lab or by a colleague
- Other (please specify)
- I do not use siRNA expression vectors

What is the most important feature in siRNA transfection reagents?

- Efficient siRNA delivery in a single cell line (high percentage of transfected cells)
- Efficient siRNA delivery to a variety of different cell lines
- Efficient silencing of endogenous gene (high level of knockdown)
- Reproducible cellular delivery
- Low toxicity
- Ease of use
- Works in the presence of serum
- Price

What cell type are you using for transfection? (Check all that apply)

Epithelial-like cells (HeLa; CaCo2...)
Fibroblast-like cells (HEK 293; COS-7...)
Endothelial-like cells (HUVEC; BAEC...)
Hepatocyte-like cells (HEPA-1; HepG2...)
Neuroblastoma (CLBPEC; SHEP...)
Leukemia cells/lymphoblasts (Jurkat; K562...)
Melanoma
Monocytes/macrophages
Myotubes/myoblasts/muscle cells
Keratinocytes
Primary cells
None of the Above/Other (please specify)

Which supplier(s) of transfection kit(s) or reagent(s) do you use? (Check all that apply)

Ambion
BD Biosciences Clontech
B-Bridge International
Bio-Rad
IMGENEX
Novagen
Stratagene
QIAGEN
Invitrogen
Mirus
Promega
None of the above/Other (please specify)

How do you measure gene silencing efficiency in your RNA interference experiments? (Check all that apply)

Fluorescence microscopy
Reporter gene assays (e.g. luciferase)
Quantitative RT-PCR/real time quantitative PCR
Northern blot
Branched DNA (b-DNA)
Western blotting
ELISA

Microarray
None of the Above/Other (please specify)

Do you track siRNA delivery and localization inside your cells?

Yes
No

If yes, which methods do you use?

siRNA fluorescent labeling kit
siRNA tracking kit
Other (please specify)

Which label(s) do you prefer? (Check all that apply)

Fluorescein
Biotin
Rhodamine
CyTM3
CyTM5
FAM
Other (please specify)

Where do you think improvements need to be made on the kits and reagents commercially available?

Improve software for identifying siRNA oligos
Increase transfection efficiency
Decrease interferon response or other non-specific affects
Increasing siRNA potency
Increasing siRNA specificity
Increasing siRNA stability
Other (please specify)

Would you want a reporter-based method for finding an effective target site?

Yes
No

**What do you look for in an inducible RNAi system?
(Select the most important)**

- Strong induction
- Fast induction
- Ability to turn on and off induction
- Don't need an inducible RNAi system

**What do you think are the best methods to measure
gene silencing effect? (mark up to three)**

- mRNA expression by microarray
- mRNA expression by Northern
- mRNA expression by real-time PCR
- mRNA expression by semi-quantitative RT-PCR
- target protein expression by Western
- target protein expression by ELISA
- target protein expression by multiplex bead assay
- target protein expression by fluorescence microscopy
- target protein expression by flow cytometry
- None of the above/Other (please specify)

**How many samples do you transfect with each
experiment?**

- Less than 10
- 11-20
- 21-50
- 51-100
- greater than 100