

Silence of the Genes

siRNA Tools

Effective Technologies For:

- siRNA Generation
- siRNA Delivery
- RNase Inhibitions
- Stable Gene Silencing

Genlantis

a division of Gene Therapy Systems, Inc

Available from **ams biotechnology (europe) ltd**

Tel: **(UK)** +44 (0)1235 828200 - **(CH)** +41 (0)91 604 55 22

info@amsbio.com - www.amsbio.com



High efficiency siRNA transfection into primary cells and cell lines

GeneSilencer® siRNA Transfection Reagent

- Superior siRNA transfection efficiencies
- Functional gene silencing post siRNA delivery
- Available in convenient 96-well high-throughput format
- Compatible with serum containing transfection media
- Low cytotoxicity

GeneSilencer siRNA Transfection Reagent is a unique cationic lipid formulation specifically designed for efficient and functional delivery of siRNA into a wide variety of cell types. This novel reagent is easy-to-use, very low in toxicity compared to competitors reagents, and is proven in both adherent and suspension cells. Successfully transfected cells include: Hela, Jurkat, MCF-7, Neuro2a, NIH-3T3, primary cortical neurons, primary cerebellar neurons, primary cardiac myocytes, primary endothelial cells, and primary macrophages*. The GeneSilencer siRNA Reagent is available in either standard multi-use vials or in convenient 96-well plates for high-throughput applications.

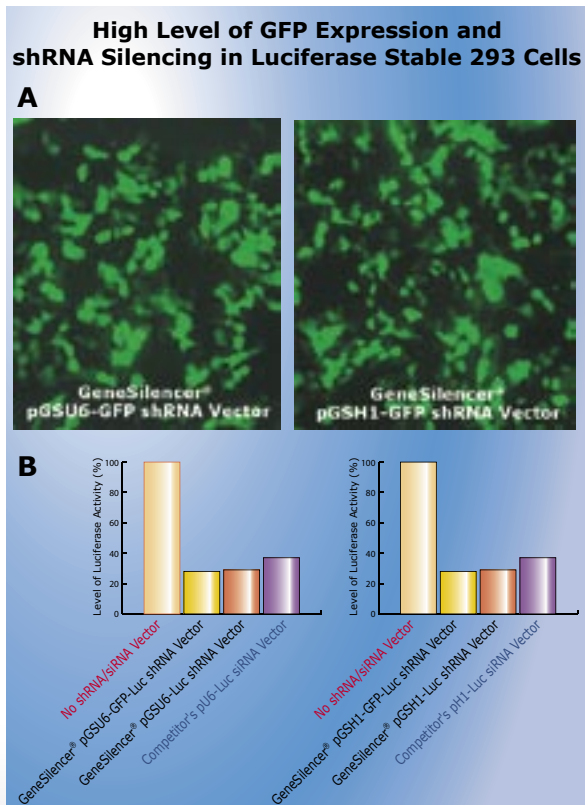
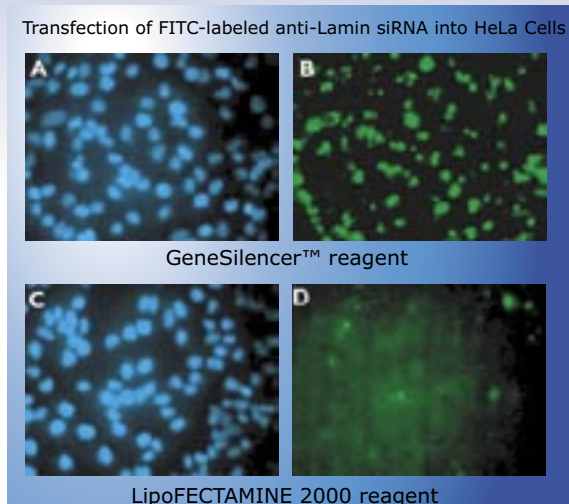
*See complete GeneSilencer citation list at www.genlantis.com

Optimized shRNA vectors for stable gene silencing with optional GFP expression cassette

GeneSilencer® shRNA Vectors

- Maximized high-level expression of shRNA with optimized H1 and U6 promoters.
- G418 resistance gene for the selection of stable cell lines.
- Available with CMV optimized GFP gene expression to track transfection efficiency.
- Convenient linear vector formats for quick cloning

The GeneSilencer® shRNA Vectors are designed to induce RNA interference (RNAi) of target genes via the expression of small hairpin RNA (shRNAs) *in vitro* or *in vivo*. Upon transfection, the shRNA sequences will be expressed as fold-back stem-loop structures that are processed inside the cell into functional siRNAs. The GeneSilencer shRNA Vectors contain either the U6 or the H1 RNA polymerase III promoter, allowing optimal expression in a wide variety of cell types. Additionally, the vectors are available with GFP reporter genes to allow easy visual determination of vector transfection efficiency. All of the vectors contain a neomycin resistance gene for convenient selection of stable cell lines.

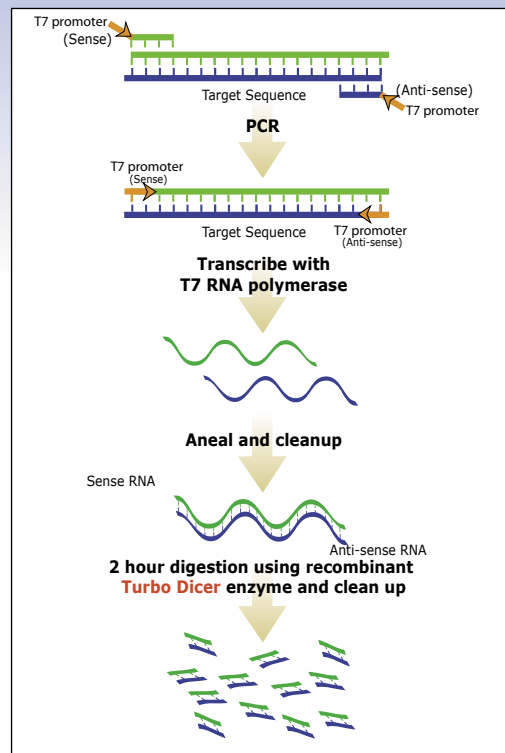


The fastest and least expensive way to identify siRNA sequences

GeneSilencer® PCR Kits

- Screen 20 siRNA sequences for less
- High siRNA expression optimized for H1 and U6 promoters
- Available with reporter gene tracking
- Flexibility for multiple siRNA production
- Fast and easy expression of siRNAs *in vitro* without cloning

The Genlantis GeneSilencer® PCR kits provide a fast, convenient, and effective way to generate up to 20 different siRNA sequences *in vitro* without the need for cloning. The kits rely on the PCR technology to enable the production of sequence specific siRNAs. The desired siRNA expression cassettes are generated by a one step PCR, and are then transfected into cells. Subsequently, the cassettes are transcribed to produce sense and anti-sense strands, which anneal *in situ* to form the duplex siRNAs that are effective for gene silencing.

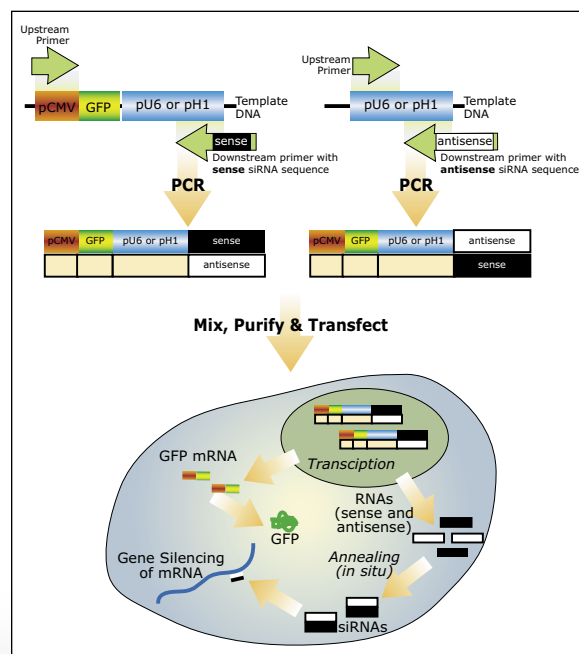


Cost-effective generation of siRNA with minimal siRNA screening

Turbo Dicer siRNA Generation Kit

- No guesswork – generates a group of siRNAs targeting entire gene
- No wasted time and money due to failed siRNA designs
- More regions of the genes can be screened for silencing
- Includes proven GeneSilencer® siRNA Transfection Reagent

The Recombinant Human Turbo Dicer Enzyme Kit uses an ultra-active form of human recombinant dicer enzyme that can cleave more than 95% of dsRNA template into 22 bp siRNAs within 2 hours under optimized reaction conditions. In contrast to individual synthetic siRNAs, the Turbo Dicer kit allows you to quickly produce multiple siRNA species against your target mRNA, and thereby achieve effective gene silencing with minimal guesswork.

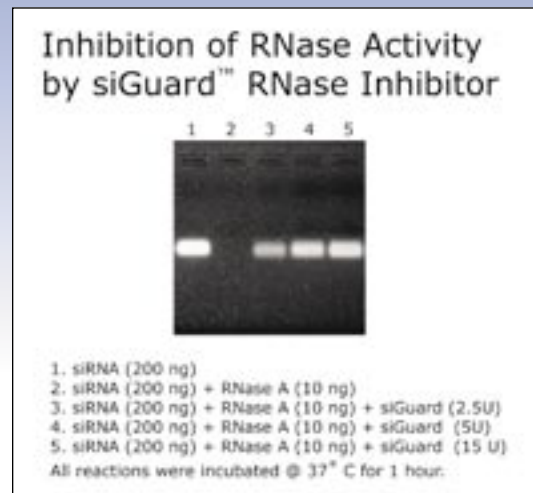


Protect your siRNA from RNase degradation

siGuard™ RNase Inhibitor

- Efficient inhibition of RNase activity
- No interference with transfection
- Stability under a broad range of transfection conditions
- Sterile, DNase- and RNase-free

siGuard™ RNase Inhibitor is specially designed to prevent degradation of siRNA samples by RNase. It is non-toxic to cells and is proven to be effective for siRNA transfection. When siGuard RNase Inhibitor is used as part of the siRNA transfection procedure, you are less likely have problems



GeneSilencer® PCR Kit		
H1 PCR Kits	20 siRNA sequences	P140100
H1-GFP PCR Kit	20 siRNA sequences	P140300
U6 PCR Kit	20 siRNA sequences	P640100
U6-GFP PCR Kit	20 siRNA sequences	P640300
GeneSilencer® siRNA Transfection Reagent and 96 Well Plates		
0.75 ml siRNA Transfection Reagent	200 reactions	T500750
5 x 0.75 ml siRNA Transfection Reagent	5 x 200 reactions	T505750
siRNA 96 Titration Plate	1 plate	T500960
siRNA 96 Titration Plate	4 plates	T504960
siRNA 96 Standard Plate High	1 plate	T500961
siRNA 96 Standard Plate High	4 plates	T504961
siRNA 96 Standard Plate Low	1 plates	T500962
siRNA 96 Standard Plate Low	4 plates	T504962
Turbo Dicer Kits		
TurboDicer siRNA Generation Kit	5 Genes/50 transfections	T520001
TurboDicer Enzyme Kit	50 units	T520002
TurboScript™ T7 Transcription Kit	20 rxn	T510003
RNA Purification Column 1	20 columns	T510004
RNA Purification Column 2	20 columns	T510005
GeneSilencer® shRNA Vectors		
pGSH1 shRNA Vector Kit	25 reactions	P100100
pGSH1-GFP siRNA Vector Kit	25 reactions	P100300
pGSU6 siRNA Vector Kit	25 reactions	P600100
pGSU6-GFP siRNA Vector Kit	25 reactions	P600300
siGuard™ RNase Inhibitor		
100µl	100 units	T520100



Available from ams biotechnology (europe) ltd

UK / IRELAND: 63B Milton Park, Abingdon OX14 4RX

Tel: +44 (0)1235 828200 - Fax: +44 (0)1235 820482

SWITZERLAND: Centro Nord-Sud 2E, CH-6934 Bioggio (Lugano)

Tel: +41 (0)91 604 55 22 - Fax: +41 (0)91 605 17 85

