

siRNA design and synthesis

Introduction:

Introduction of double stranded RNA (dsRNA) into cells can suppress gene expression by mechanisms such as mRNA degradation or inhibition of translation.

In animals and plants, the introduction of long dsRNAs induces selective mRNA destruction. The long dsRNAs (300-500 bp) are recognized and processed to small pieces of 21 - 25 nucleotide dsRNAs termed short interfering RNA (siRNA) mediated by the Dicer enzyme.

In addition to siRNAs, small temporal RNA (stRNA) represent a large group of small transcripts of ~ 70 nucleotide RNA molecules that adopt stem loop folds, which further process to (20-25) nucleotide transcripts.

Bangalore Genei introduces the services to generate:

- Long dsRNAs (300 - 500 bp)
- Diced dsRNAs of (21-25) nucleotide length
- stRNAs of ~70 nucleotides with stem-loop structure.

Ordering Information:

Product	Service	Cat #
siRNA Design and Synthesis	Per Gene	107419

Service Tax as applicable will be charged extra

Features:

- Designing, synthesis and validation of dsRNA, siRNA or stRNA for a gene of interest within a system under study
- Multiple regions of the gene can be targeted and RNAi developed and validated
- stRNA can be developed within a transcription vector of choice. stRNA of exact size and sequence can be developed with no extra nucleotides
- Fast and reliable service

Deliverables:

1. Enough RNAi for multiple experiments spotted on 96-well plates
2. Sequence confirmed transcription clone for stRNA
3. Final report with details of protocols followed for the project

Delivery Time: Please Inquire

Note: Please Contact geneiservice@sanmargroup.com

Custom Development of DNA Ladders

Introduction:

Design a molecular weight marker suitable for your own research. The custom designed DNA ladders can be used as internal short tandem repeats (STR) controls or for quick sizing of PCR products with known size range. Ladders having upto 10 bands within 100 bp to 10 kb can be developed. Custom made ladders would typically have all bands with similar intensity on a gel.

Ordering Information:

Product	Size	Cat #
Custom Development of DNA Ladders	Per Sample	105319

Service Tax as applicable will be charged extra

Features:

- Custom designed DNA Ladder
- Upto 10 different sized DNA fragments within 100 bp to 10 kb provided
- DNA Marker with fragments of exact size

Deliverables:

100 µg of custom-made DNA ladder with fragments of exact size as required.

Delivery time: Please Inquire

Note: Please Contact geneiservice@sanmargroup.com