

RNA Synthesis

Synthesis of RNA requires a strong expertise in oligonucleotide chemistry. At Rib maxx, we aim at pushing the RNA synthesis to its limits, i.e. the length of RNA, the amount of RNA and the chemistry. Rib maxx has developed a unique expertise in the field of synthesis of RNA longmers (up to 80 nt, Figure 1). Another field of expertise relates to the amount of RNA. Here the ENOVA[®] process for a large scale synthesis of RNA has been developed. This process enables exponential amplification and synthesis of RNA *in vitro* using the proprietary Rib maxx Technology.

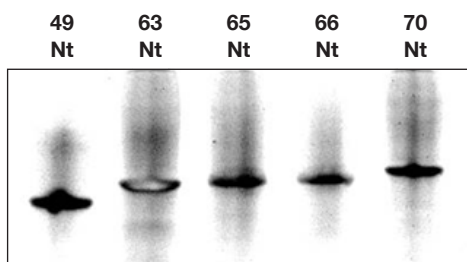


Figure 1. RNA longmer synthesis at Rib maxx: Gel-electrophoretic analysis of crude (!) products of RNA oligonucleotide synthesis. Samples were taken from the crude products of a 49mer, 63mer, 65mer, 66mer and 70mer RNA oligonucleotide and were analyzed on a denaturing 12% polyacrylamide gel.

RNA Analytics

RNA is by its nature a highly structured molecule. This results in increased difficulties as to purification and analysis of RNA oligonucleotides, in particular when considering longmers (60-80 nt) with strong tertiary conformation, i.e. aptamers.

Rib maxx has developed a strong expertise in the purification and analytics of nucleic acids with a focus on RNA oligonucleotides. Rib maxx employs the full range of analytical methods, including LC/MS (Figure 2), and constantly refines its electrophoretic and chromatographic superlative technologies.

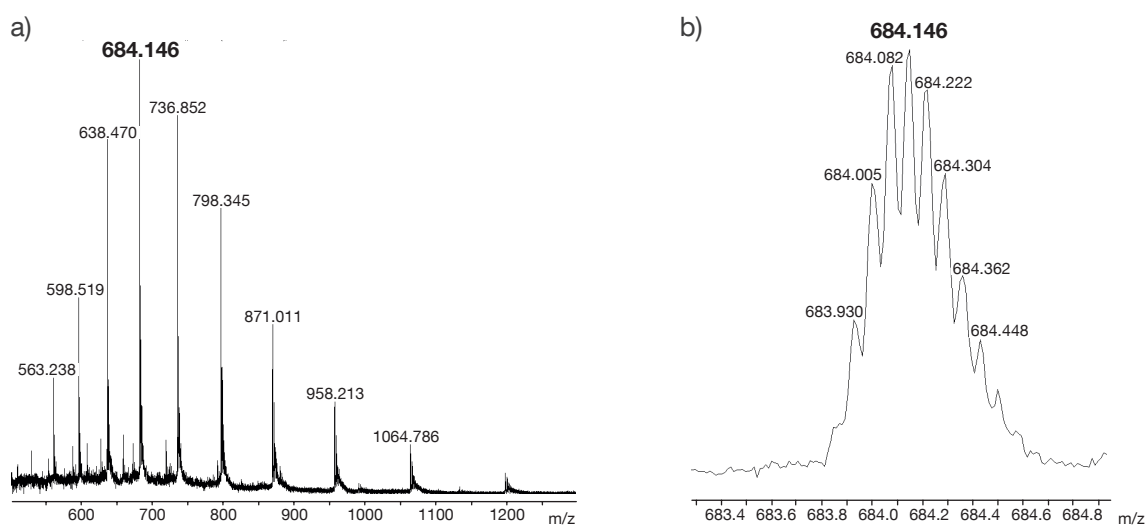


Figure 2. Mass spectrometric analysis (ESI-TOF MS) of a 30mer RNA aptamer. (a) Typical charge state distribution. (b) Charge state: $[M-14H]^{14-}$, m/z calc = 684.19, m/z found = 684.15.

RNA Synthesis & Analytics

Ordering Information

To meet your specific experimental needs, Riboxx offers a wide range of scales and configurations of the RNA:

Product Name	Cat. No.	Quantity		Purification / QC
Custom RNA (71-80 nt)				
Custom ssRNA S	C-00102-0002-D	5 nmol	>1.0 OD	RP / IEX HPLC
Custom ssRNA M	C-00103-0020-D	20 nmol	>4 OD	RP / IEX HPLC
Custom ssRNA L	C-00201-0200-D	200 nmol	>40 OD	RP / IEX HPLC
Custom ssRNA XL	C-00301-1500-D	1500 nmol	>300 OD	RP / IEX HPLC
Custom ssRNA HT 96	C-00401-0096-D	1 nmol each	>0.2 OD each	RP / IEX HPLC
Custom ssRNA Large Scale	C-00501-3000-D	>3000 nmol	>600 OD	RP / IEX HPLC

Order

Products & Services can be ordered by:

Fax: 0049 (0)351 83 36 01-39

E-Mail: order@riboxx.com

Online-Shop: www.riboxx.com

Support & Technical Assistance

For technical assistance please visit www.riboxx.com or contact us directly:

Phone: 0049 (0)351 83 36 01-0

Fax: 0049 (0)351 83 36 01-39

E-Mail: support@riboxx.com

Other Riboxx Products & Services

IBONI® - *in vitro* siRNA

- Prolonged gene silencing
- Reduced off-target effects
- Gene Silencing Guarantee Service

IBONI® siRNA Control

- Pre-designed double-stranded RNA
- Successfully validated by independent scientists
- Positive and negative controls

riboxx® RNA

- 7 - 80 base pairs
- Scale up to 1 gram
- Modified or non-modified

riboxx® Custom siRNA Libraries

- Increased knock-down efficiency
- Enhanced RNase resistance
- Gene Silencing Guarantee service

riboxx® FECT (with Chromo-GAPDH-siRNA)*

- Powerful transfection reagent for siRNA, RNA, miRNA
- ***Control of transfection and gene silencing efficiency**
- For adherent cells or cells in suspension
- Perfect compatibility with riboxx® products

IVORI® - *IN VIVO* siRNA

- Maximal gene silencing
- Enhanced serum stability
- Less toxicity

CONTRAmir™ - miRNA Inhibitor

- Pre-designed or custom
- Backbone modifications
- End modifications

CONmir™ - miRNA Mimic

- Pre-designed or custom
- Backbone modifications
- End modifications

Additional Services

- Design of siRNA targets
- Additional purification
- Additional quality control
- **Special services on request**