





# riboPOOLs for Ribosome Profiling Efficient Ribosomal RNA Depletion For Ribosome Profiling (Ribo-Seq)

Optimized probe ratio for Ribo-Seq:

- ✓ Extremely abundant rRNA contaminations are targeted
- ✓ Gapless coverage of rRNA for even rRNA depletion

Ribosome Profiling (Ribo-Seq) identifies actively translated RNAs by sequencing only those 30b-long mRNA fragments protected by ribosomes. The nuclease digest, degrading unprotected mRNA outside of ribosomes also generates highly abundant ribosomal RNA contaminations making up for the large majority of sequencing reads. siTOOLs Biotech generated an efficient Ribo-Seq riboPOOL targeting primarily those extremely abundant rRNA contaminations commonly found in Ribo-Seq samples. In addition, the entire rRNA sequence is covered with capture probes to deplete any less abundant rRNA fragment.



# Ribosome Profiling Workflow\*

- 1. Isolation of mRNAs on polysomes
- 2. Nuclease digestion
- 3. Preparative RNA Gel (Size-Selection)
- 3. rRNA depletion with riboPOOLs
- 4. Library Preparation
- 5. Sequencing
- 6. Data Analysis
  - \*workflow may vary

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#### Currently available:

(O)	Human Ribo-Seq riboPOOL optimal coverage of extremely abundant human rRNA contaminations and entire human rRNA sequence	ID: 42
	<b>Mouse/Rat Ribo-Seq riboPOOL</b> optimal coverage of extremely abundant mouse/rat rRNA contaminations and entire mouse/rat rRNA sequence	ID: 52
<b>E</b>	Human/Mouse/Rat Ribo-Seq riboPOOL equimolar mixture of Human Ribo-Seq riboPOOL & Mouse/Rat Ribo-Seq riboPOOL	ID: 50

#### rRNA depletion efficiency:

The Ribo-Seq riboPOOLs were tested by independent labs\* with rRNA depletion efficiencies ranging between 50 -75%, while the integrity of the transcriptome was maintained (Spearmen correlation >=95% between non-depleted and depleted samples).

\* MDC Berlin (Max-Delbrück-Centrum für Molekulare Medizin), University of Lausanne CIG (Center for Integrative Genomics)

### Further information:

- Enzyme-free depletion
- rRNA depletion completed in 70 mins
- Suitable for RNA input amounts from 100 ng 3  $\mu g$
- Compatible with various RNA clean-up methods & RNA-Seq library preparation kits

#### Available formats:

<b>Contact us or our Distributors for questions and orders.</b> Quick order now on webshop!			SCIENCE IS OUR BUSINESS Biozym Scientific GmbH Tel: 05152/9020, Fax: 05152/2070 Mail: support@biozym.com		Biozym Biotech Trading GmbH Tel: 01/33401560, Fax: 01/334015688 Mail: wien@biozym.com		
		Bi	02572	m v	/w/w.l	biozym.com	
2. Complete riboPOOL kits (includes buffers, streptavidin-magnetic beads, reaction tubes and ethanol precipitation reagents)	6 rx Trial (one-time purchase)	12 rx		24 rx		96 rx	
1. Probes alone with nuclease-free water 2 nm		0 rx) 5 nr		5 nmol (50 rx)		10 nmol (100 rx)	

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