Better RNA-Seq for all species
with riboPOOLs rRNA depletion kits
Improve and economize your RNA-Seq experiments by removing rRNAs

Why riboPOOLs?

ribosomal RNA (rRNA) accounts for 80-90% of the transcriptome limiting detection efficiency of desired RNAs (e.g. mRNAs) by RNA-Seq. The removal of rRNAs greatly improves and economizes RNA-Seq. riboPOOLs are highly complex pools of biotinylated DNA oligos, offering a flexible & efficient solution for selective and bias-free rRNA depletion in any RNA sample.

Any Species or abundant RNA

Some tissues express very high levels of certain RNAs. In blood, for instance, globin mRNA makes up 30-80% of total RNA. We offer riboPOOLs for abundant transcripts which can be combined with standard riboPOOLs for an efficient, one-step depletion of all abundant RNAs. riboPOOLs can be custom designed for any species and any abundant transcript. Furthermore, all riboPOOLs can be freely combined for any type of complex RNA sample.

Reproducible & Efficient rRNA Removal

riboPOOLs show high rRNA depletion efficacy across species, reaching up to 99%. For strongly degraded RNA samples we offer optimized riboPOOLs to achieve even & efficient rRNA removal of up to 95%. To meet the special requirements of ribosome profiling (Ribo-Seq) we develop dedicated Ribo-Seq riboPOOLs for a growing number of species. On top of excellent efficiency, in-house and customer data suggest excellent reproducibility between biological replicates.
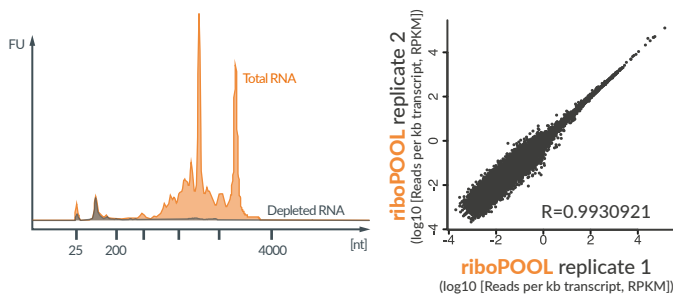

Figure 1: **Highly reproducible & efficient rRNA depletion with riboPOOLs**. Left: Agilent Bioanalyzer data demonstrating rRNA depletion with Pan-Archaea riboPOOL on H. volcanii total RNA. Sequencing revealed 97% depletion efficiency. Right: High reproducibility between biological replicates with human riboPOOL.

✓ **Efficient & Reproducible RNA-Seq**
✓ **rRNA Depletion For Any Species Or RNA**
✓ **Easy & Fast rRNA Depletion Workflow**

Simple & Fast Workflow

riboPOOLs' hybridization-based workflow allows fast & easy rRNA removal. The workflow follows four main steps:

1. Preparation of siBeads & riboPOOL
2. Hybridization of riboPOOL to target RNA
3. rRNA depletion
4. RNA clean up

The workflow can be completed within 70 minutes and allows a wide RNA input range of 10 ng - 3 µg. The riboPOOL workflow can be scaled up to 10 µg and is automation-friendly for high throughput rRNA removal. After the rRNA removal, the resulting RNA can be processed by any library preparation kit.
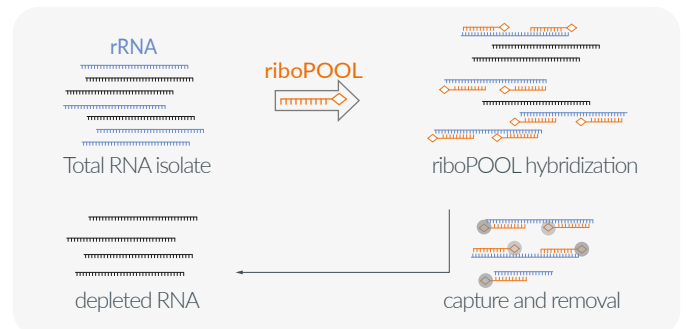

Figure 2: **Schematic riboPOOL Workflow** 1. Preparation of siBeads & riboPOOL 2. Hybridization of riboPOOL to target RNA 3. rRNA depletion 4. RNA clean up

Available Formats:

1. **Probes alone with nuclease-free water**

12 rx	24 rx	96 rx
Catalog-No. dp-P012	Catalog-No. dp-P024	Catalog-No. dp-P096

2. **riboPOOL kits**
(includes buffers, streptavidin-magnetic beads, reaction tubes and ethanol precipitation reagents)

6 rx Trial	12 rx	24 rx	96 rx
Catalog-No. dp-K006	Catalog-No. dp-K012	Catalog-No. dp-K024	Catalog-No. dp-K096

Pan-riboPOOLs

	riboPOOL ID:
Bacteria & Archaea	
Pan-Prokaryote riboPOOL	003
Bacteria	
Pan-Bacteria riboPOOL	026
(Gram Positive & Gram negative Bacteria)	
Pan-Actionobacteria riboPOOL	035
Archaea	
Pan-Archaea riboPOOL	027
Plants	
Pan-Plant riboPOOL	031
Vertebrata	
Pan-Mammal riboPOOL	041
Pan-Bird riboPOOL	032
Mollusca	
Pan-Mussel riboPOOL	089
Fungi	
Pan-Fungi riboPOOL	043
Other	
Seawater riboPOOL	068
Blood Parasite riboPOOL	051
Pan-Sponge riboPOOL	044

Special Applications riboPOOLs

FFPE & degraded RNA samples

Vertebrata	riboPOOL ID:
Equus caballus	092
Felis catus	093
Homo sapiens	057
Homo sapiens / Mus musculus / Rattus Norvegicus	056
Mus musculus / Rattus Norvegicus	058
Arthropoda	
Drosophila melanogaster	061
Nematoda	
Caenorhabditis elegans	062

Ribosome Profiling (Ribo-Seq)

	riboPOOL ID:
Mus musculus / Rattus Norvegicus	052
Homo sapiens	042
Homo sapiens / Mus musculus / Rattus Norvegicus	050
Drosophila melanogaster	076
Caenorhabditis elegans	067
Trypanosoma brucei	077
Leishmania mexicana	078
Azolla filiculoides	079
Pristionchus pacificus	082
Toxoplasma gondii	083

Single Species riboPOOLs

Bacteria	riboPOOL ID:
Bacillus subtilis	012
Caulobacter crescentus	013
Clostridium perfrigens	015
Escherichia coli	004
Pseudomonas aeruginosa	018
Salmonella enterica	022
Staphylococcus aureus	021
Stenotrophomonas sp.	023
Wolbachia pipientis	086
Archaea	
Haloferax volcanii	016
Plants & Algae	
Arabidopsis thaliana	008
Chlamydomonas reinhardtii	071
Cyanidioschyzon merolae	075
Emiliania huxleyi	033
Oryza sativa	009
Vertebrata	
Chinchilla lanigera	014
Danio rerio	010
Gallus gallus domesticus	060
Homo sapiens	054
Human blood	094
Mus musculus / Rattus Norvegicus	055
Nematoda	
Caenorhabditis elegans	039
Platyhelminthes	
Schmidtea mediterranea	028
Schistosoma mansoni	090
Sponges & Cnidarians	
Amphimedon queenslandica	011
Nematostella vectensis	087
Fungi	
Cryptococcus neoformans	084
Filamentous-Fungi	006
Pichia pastoris	019
Saccharomyces cerevisiae	005
Schizosaccharomyces pombe	059
Ustilago maydis	024
Arthropoda	
Aedes albopictus	047
Apis mellifera	073
Argiope bruennichi	074
Bemisia tabaci	080
Drosophila melanogaster	007
Ixodes scapularis	030
Leptinotarsa decemlineata	072
Plautia stali	020
Spodoptera exigua	085
Varroa destructor	081
Mollusca	
Crassostrea gigas	063
Loripes orbiculatus and Lucinoma aequizonata (Clams)	017
Other:	
SARS-CoV-2 RNA	038
Modules:	
human Globin mRNA	025
human - 7SL	300
Poly A (Poly-Adenylated RNAs)	034

Custom riboPOOLs design (for the Species of your choice)

If your species is not listed above, create a Custom riboPOOL with our One-Time riboPOOL Set Up Service.

Contact us at **info@siTOOLs.de** or **+49 (0) 89 12501 4800**
Find your local **Distributor** on our website www.sitoolsbiotech.com/distributors.php
Quick order now on webshop!