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.

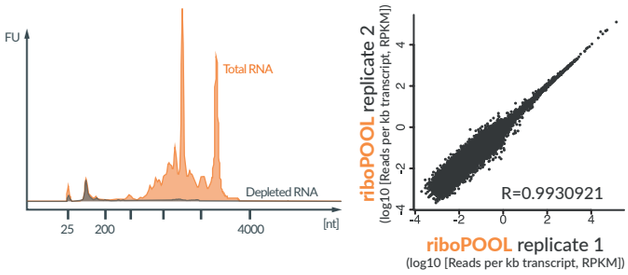


Figure 1: **Highly reproducible & efficient rRNA depletion with riboPOOLs**. Left: Agilent Bioanalyzer data demonstrating rRNA depletion with Pan-Archaea riboPOOL on H. volcanii total RNA. Sequencing revealed 97% depletion efficiency. Right: High reproducibility between biological replicates with human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

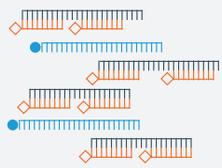
- ✓ Efficient & Reproducible RNA-Seq
- ✓ rRNA Depletion For Any Species Or RNA
- ✓ Easy & Fast rRNA Depletion Workflow

Simple & Fast Workflow

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

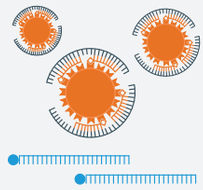
1 Hybridize probes

The riboPOOL biotinylated probes hybdrize to target rRNAs.



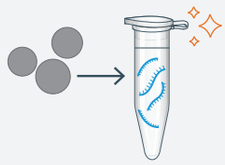
2 Pull-down

Target rRNAs are pulled-down via streptavidin-coated magnetic beads.



3 RNA Purification

Purification of rRNA-depleted samples with RNA clean-up beads.



Legend: rRNA | RNA of interest | riboPOOL probes | Streptavidin beads | Clean-up beads

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

riboPOOLs portfolio

Single Species riboPOOLs


Aedes albopictus ID: 47


Amphimedon queenslandica ID: 11


Anaeramoeba flamelloides ID: 95


Anopheles gambiae ID: 97


Apis mellifera ID: 73


Arabidopsis thaliana ID: 08


Argiope bruennichi ID: 74


Azolla filiculoides ID: 79


Bacillus subtilis ID: 12


Bemisia tabaci ID: 80


Caenorhabditis elegans ID: 39


Caulobacter crescentus ID: 13


Chinchilla lanigera ID: 14


Chlamydomonas reinhardtii ID: 71


Clostridium perfringens ID: 15


Crassostrea gigas ID: 63


Cryptococcus neoformans ID: 84


Cupriavidus necator ID: 102


Cyanidioschyzon merolae ID: 75


Danio rerio ID: 10


Drosophila melanogaster ID: 07


Emiliania huxleyi ID: 33


Escherichia coli ID: 04


Eubacterium limosum ID: 70


Gallus gallus domesticus ID: 60


Haloferax volcanii ID: 16


Human ID: 54


Ixodes scapularis ID: 30


Leptinotarsa decemlineata ID: 72


Nematostella vectensis ID: 87


Olavius algarvensis ID: 103


Oryza sativa ID: 09


Pichia pastoris ID: 19


Plautia stali ID: 20


Pseudomonas aeruginosa ID: 18


Saccharomyces cerevisiae ID: 05


Salmonella enterica ID: 22


Schistosoma mansoni ID: 90


Schizosaccharomyces pombe ID: 59


Schmidtea mediterranea ID: 28

Spodoptera exigua ID: 85

Staphylococcus aureus ID: 21

Stenotrophomonas sp. ID: 23

Strongyloides ratti ID: 106

Thalassiosira pseudonana ID: 96

Ustilago maydis ID: 24

Varroa destructor ID: 81

Wolbachia pipientis ID: 86

Special Applications riboPOOLs

Ribosome profiling & degraded RNA

Acanthamoeba castellanii Ribo-Seq ID: 99

Arabidopsis thaliana Ribo-Seq ID: 105

Danio rerio Ribo-Seq ID: 101

Ectocarpus siliculosus Ribo-Seq ID: 100

Escherichia coli Ribo-Seq ID: 104

C. elegans Ribo-Seq ID: 67

C. elegans degraded RNA ID: 62

D. melanogaster Ribo-Seq ID: 76

D. melanogaster degraded RNA ID: 61

Equus caballus degraded RNA ID: 92

Felis catus degraded RNA ID: 93

Human Ribo-Seq ID: 42

Human degraded RNA ID: 57

Human/Mouse/Rat Ribo-Seq ID: 50

Human/Mouse/Rat degraded RNA ID: 56

Leishmania mexicana Ribo-Seq ID: 78

Mouse/Rat Ribo-Seq ID: 52

Mouse/Rat degraded RNA ID: 58

Pristionchus pacificus Ribo-Seq ID: 82

S. cerevisiae Ribo-Seq ID: 49

Toxoplasma gondii Ribo-Seq ID: 83

Trypanosoma brucei Ribo-Seq ID: 77

Pan-riboPOOLs

Multiple species

Blood parasite ID: 51

Filamentous-Fungi ID: 06

Human/mouse/rat ID: 53

Loripes orbiculatus Lucinoma aequizonata ID: 17

Mouse/Rat ID: 55

Pan-Actinobacteria ID: 35

Pan-Archaea ID: 27

Pan-Bacteria ID: 26

Pan-Bird ID: 32

Pan-Fungi ID: 43

Pan-Mammal ID: 41

Pan-Mussel ID: 89

Pan-Plant ID: 31

Pan-Prokaryote ID: 03

Pan-Sponge ID: 44

Seawater ID: 68

riboPOOLs for abundant RNAs

Poly A (Poly-Adenylated RNAs) ID: 34

SARS-CoV-2 RNA ID: 38

Human Globin ID: 25

Custom riboPOOLs

If your species is not listed above, order a Custom riboPOOL with our one-time riboPOOL set-up service.

Contact us at info@siTOOLs.de or +49 (0) 89 12501 4800