

riboPOOL

Efficient, Affordable Ribosomal RNA Depletion For Any Species

Removing ribosomal RNAs (rRNAs) to allow sensitive detection of scientifically relevant RNAs by Next Generation Sequencing, is currently performed with costly kits limited to well-studied species.

riboPOOLS present an **affordable and flexible solution** that gives scientists absolute freedom to deplete rRNAs or other custom RNAs from **any species**.

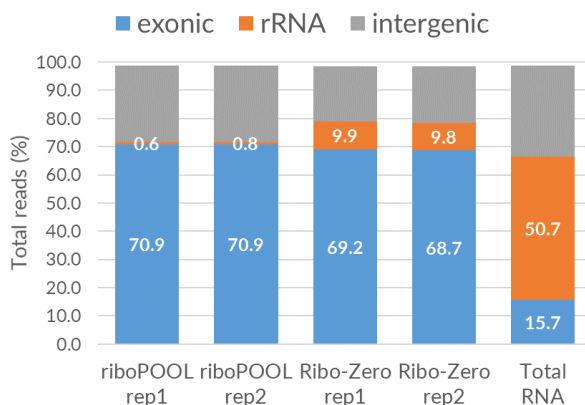
Composed of high complexity pools of optimally-designed biotinylated DNA probes, **riboPOOLS even outperformed Ribo-Zero** (Illumina), depleting ~10% more rRNA while leaving other RNA intact.

Benefits of riboPOOLS

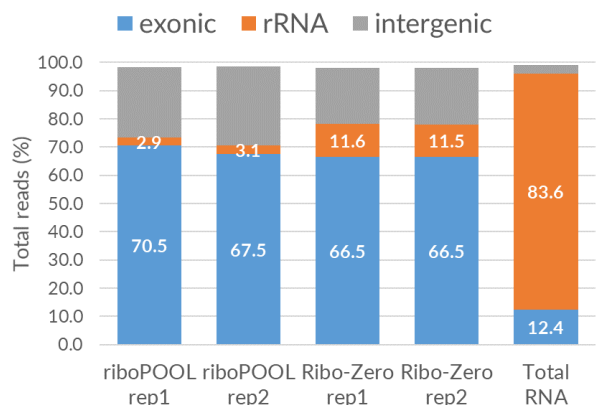
- **Highly efficient and specific** depletion of all ribosomal RNAs (cytoplasmic + mitochondrial)
- **Any species.** Human, Mouse, Planarian, Drosophila, Silkworm in-stock. New species available on demand.
- **Low cost solution**
- **Deplete custom RNA** (e.g. globin for whole blood samples)
- Applicable for **polyadenylated** and **non-polyadenylated RNAs** (e.g. long non-coding RNAs)
- **Custom scales available**

Supporting Data

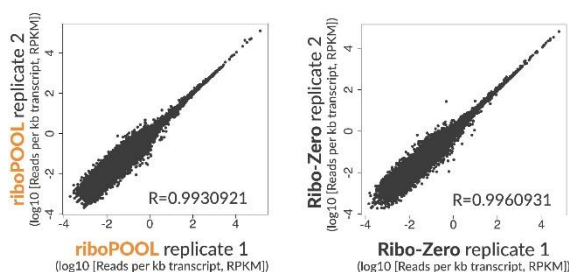
Human riboPOOL depleted 98.6% of rRNA, compared to 80.6% by Ribo-Zero



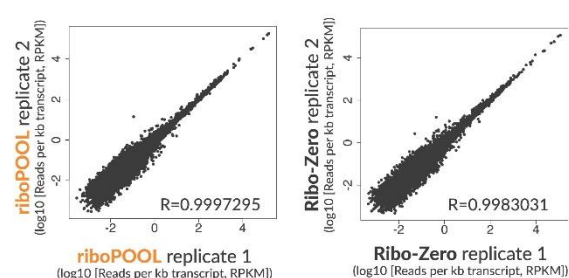
Mouse riboPOOL depleted 96.4% of rRNA, compared to 86.1% by Ribo-Zero



High reproducibility between biological replicates with human **riboPOOLS**



High reproducibility between biological replicates with mouse **riboPOOLS**



Total RNA (1 µg) isolated from HeLa cells or mouse embryonic fibroblasts was subject to riboPOOL (siTOOLS) or Ribo-Zero (Illumina) rRNA depletion. RNA integrity was measured on Agilent 2100 Bioanalyzer and having met quality standards (RIN ≥ 7.5), 250 ng RNA was subject to library preparation with Illumina TruSeq® Stranded Total RNA technology. Sequencing was performed on Illumina NextSeq® 500 under high output mode with 1x75 bp single-read chemistry and a sufficient amount of high quality reads was generated. RNA-Seq analysis was performed with CLC Genomics Workbench.

Acknowledgements

Experiments and analysis kindly performed by collaborators from Core Unit Systems Medicine (University of Würzburg) using a protocol developed by the Kuhn Lab at the University of Bayreuth. Sequencing was kindly performed by IMGm Laboratories GmbH.

Other information

- riboPOOLS are HPLC-purified and shipped freeze-dried at r.t.
- Magnetic beads, buffers and RNA purification reagents to be obtained separately (kits available Q3 2019)
- Scales available: 2, 5 and 10 nmol for 20, 50 or 100 reactions. For larger scales, please enquire.
- Protocol provided
- To order/request a quote, email us info@sitools.de or contact our Distributors.

Workflow

