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# Nurture Growth, Harvest Discoveries

Unveil the Complete Plant Transcriptome with RiboCop

### **Enhancing Plant Transcriptomics**

### Get the best sequencing results with convenient end-to-end RNA-Seq workflows!

Plant total RNA is comprised of large amounts of undesired ribosomal RNA (rRNA) which accounts for up to ~97 % of all transcripts. Lexogen's RiboCop rRNA Depletion Kits for Plants **remove undesired cytoplasmic (5.8S, 18S and 25S)**, **mitochondrial (5S, 18S and 26S) and plastid (4.5S, 5S, 16S and 23S) rRNA** from intact as well as degraded input RNA. Ribodepletion thus affords an unbiased view of the transcriptome, including non-coding and non-polyadenylated transcripts.

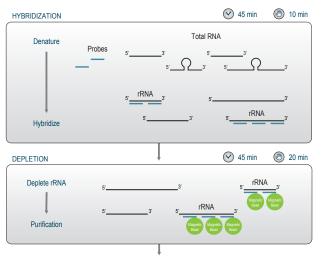
# Preserve RNA Integrity with Fragmentation-free rRNA Removal using RiboCop

RiboCop uses a set of affinity probes designed for specific and efficient depletion of rRNA sequences from intact as well as degraded input RNA. Lexogen's sophisticated probe design minimizes off-target effects that can distort NGS data.

Input amounts as low as 1 ng and up to 1 µg total RNA are applicable. No enzymatic reactions or mechanical shearing steps are involved, **preserving full-length transcripts intact for down-stream processing.** RiboCop for Plants is ideally suited for Next Generation Sequencing (NGS) approaches and seamlessly integrates into CORALL RNA-Seq library preparation (Fig. 1).

#### **Broad Species Compatibility and Efficient Depletion**

RiboCop enriches RNAs of interest across a **wide range of total RNA input amounts from 1 ng - 1 µg** by removing all subclasses of undesired rRNA, i.e., cytoplasmic, mitochondrial, and plastid rRNAs. Thereby, RiboCop enriches RNAs of interest across a range of different plant species and **is suitable for depletion of various crops including corn (***Zea mays***), soybean (***Glycine max***), <b>and others** (Fig. 2).



#### CORALL RNA-Seq Library Preparation

Figure 1 | RiboCop rRNA Depletion workflow.

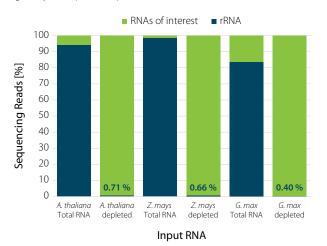


Figure 2 | RiboCop rRNA Depletion for Plants efficiently removes rRNA from A. thaliana, Z. mays, and G. max.

#### Key Benefits for Plant RNA-Seq with RiboCop



Unlock the full potential of low input and lowly concentrated samples - RiboCop supports a wide input range from **1 ng - 1 µg** total RNA.



**Enzyme-free rRNA depletion preserves fulllength RNA** and is ideally suited for processing even degraded samples.



**Simultaneous depletion of plant and microbe** with convenient combinations of RiboCop for Plants and RiboCop Bacteria kits.

#### In Need for RNA-Seq Library Preparation?



Lexogen's RiboCop kits seamlessly integrate with CORALL RNA-Seq library preparation kits. The full workflow can be completed in under 6 hours: **from sample to sequencing-ready library in less than one day!** 

#### Full NGS Services Available!



Lexogen NGS Services offers a variety of workflow options for plant transcriptomics, including expression profiling, isoform and non-coding RNA analysis, small RNA transcriptomics, and DNA sequencing. Simply send your samples and let our experts extract the best data possible for you.

#### **End-to-end Workflow Solutions for Plant Transcriptomics**

	RNA Extraction	RNA Preparation	NGS Library Prep	NGS Data Analysis
Expression Profiling	SPLIT RNA Extraction	not needed!	QuantSeq 3' mRNA-Seq	Kangooroo Data Analysis
Whole Transcriptome	SPLIT RNA Extraction	RiboCop for Plants	CORALL RNA-Seq	Kangooroo Data Analysis
Small RNA-Seq	TraPR sRNA Isolation	not needed!	Small RNA-Seq	Custom Bioinformatics
Plant-Microbe	SPLIT RNA Extraction	RiboCop for Plants / RiboCop META	CORALL RNA-Seq	Custom Bioinformatics
Long-read Seq	SPLIT RNA Extraction	TeloPrime full-length cDN	NA + library conversion	Custom Bioinformatics
RNA- and DNA-Seq	Lexogen NGS Services			

#### Meet the Family! RiboCop rRNA Depletion is Available for a Wide Variety of Species

RiboCop rRNA Depletion Kits are available for a wide range of species, including human, mouse, rat, bacteria (G+, G-, META), yeast, and plants. The different RiboCop mixes can be easily combined for full flexibility and efficient simultaneous multi-species depletion.



#### RiboCop rRNA Depletion Kits - Find Your Match!

Cat. №	Product Name		
rRNA and Globin Depletion for Human/Mouse/Rat			
144	RiboCop rRNA Depletion Kits for Human/Mouse/Rat		
145	RiboCop rRNA Depletion Kits for Human/Mouse/Rat Plus Globi <b>n</b>		
rRNA Depletion for Bacteria			
125	RiboCop rRNA Depletion Kits for Mixed Bacterial Samples (META)		
126	RiboCop rRNA Depletion Kits for Gram Negative Bacteria (G-)		
127	RiboCop rRNA Depletion Kits for Gram Positive Bacteria (G+)		
rRNA Depletion for Yeast and Fungi			
190	RiboCop rRNA Depletion Kits for Yeast		
rRNA Depletion for Plants			

237 RiboCop rRNA Depletion Kits for Plants

#### Associated Products to complete your RNA-Seq workflow:

125	RiboCop rRNA Depletion Kits for Mixed Bacterial Samples (META)
171 and 175	CORALL RNA-Seq Library Prep Kits with UDI 12 nt Set A1 (171) and Set B1 (175)
208	PCR and Reamplification Add-on V2
008	SPLIT RNA Extraction Kits

For more information and additional resources, please visit our <u>website</u>.

