

Selected Suppression Probes – SSP™

Highly-expressed RNA species reduce read depth of less abundant species that researchers care about. RealSeq Biosciences has developed a targeted removal probe (Selective Suppression Probe- SSP™) approach to depleting over-abundant species from RNA samples, resulting in increased miRNA reads and greater sequencing depth of miRNAs.

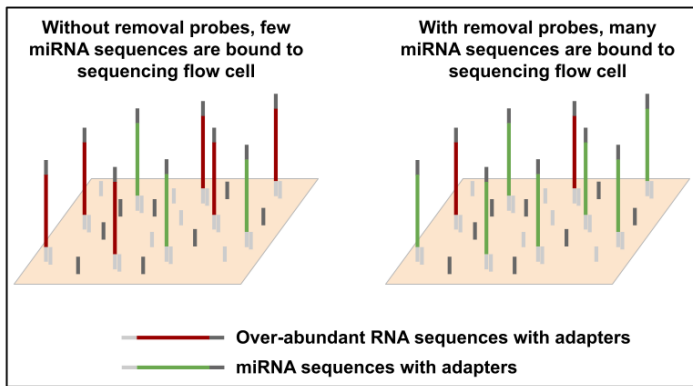


Figure 1. RealSeq Removal Probes deplete over-abundant RNA sequences so that more sequencing space is dedicated to interesting sequences.

miRNAs ARE HIDDEN IN SAMPLES CONTAINING HIGHLY-EXPRESSED RNAs

Many RNA samples contain highly-expressed species such as rRNAs and tRNAs, wasting costly sequencing reads. Consequently, less abundant miRNAs are sequenced less frequently and with less depth requiring higher read coverage to obtain robust data. Acquiring higher numbers of reads per sample limits the number of samples in a sequencing pool and increases the cost per run significantly.

CUSTOM LIBRARY PREP STRATEGIES THAT WORK

RealSeq Biosciences has developed a targeted, customizable removal probe approach (Selective Suppression Probes- SSPs) that depletes uninteresting, over-abundant RNA fragments from your samples. **Figures 1 and 2** shows RealSeq® -Biofluids library prep on a sample containing high levels of rRNA reads with and without SSPs. **We can reliably reduce unwanted rRNA reads to about 0.1% of total reads while increasing miRNA reads by 50%.**

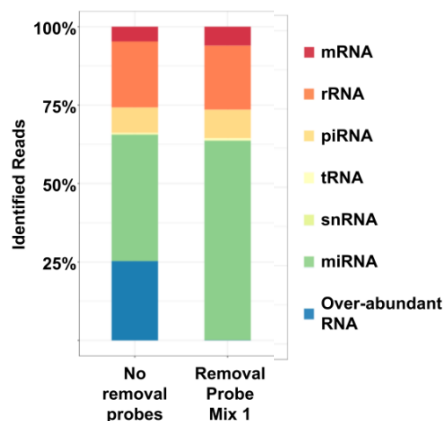


Figure 2. RealSeq Biosciences' removal probes deplete RNA samples of highly-expressed RNA species and enhance reads of miRNAs. A panel of removal probes mixes were tested in triplicate with total RNA purified from human plasma.

SSPs IMPROVE miRNA SEQUENCING

RealSeq's Selective Suppression Probe technology coupled with RealSeq Library prep enhances the miRNA reads you care about AND reduces your sequencing costs. We offer standard probes for human samples and customizable probes for your research needs. Contact us about your project to achieve high-quality results!

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