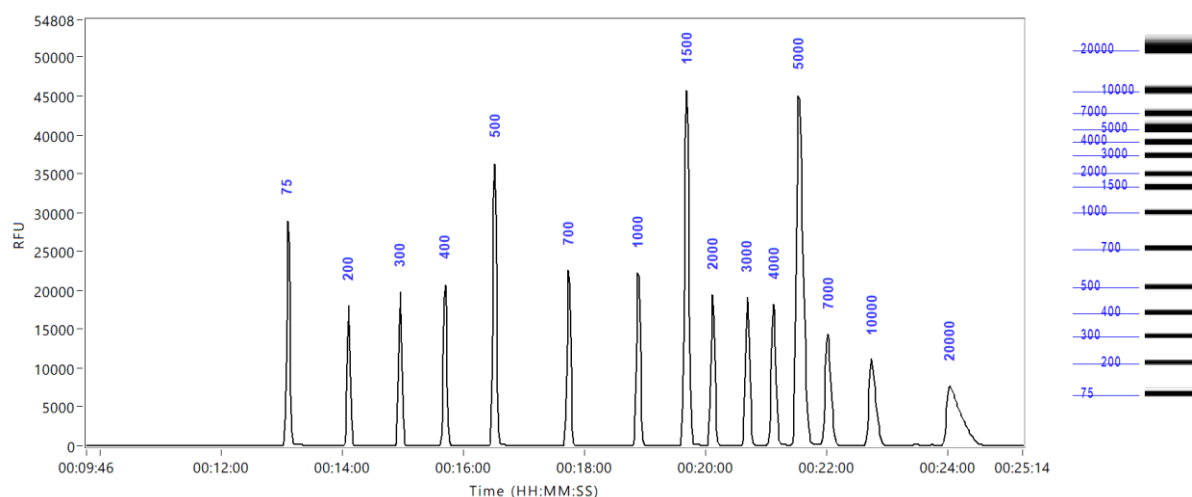


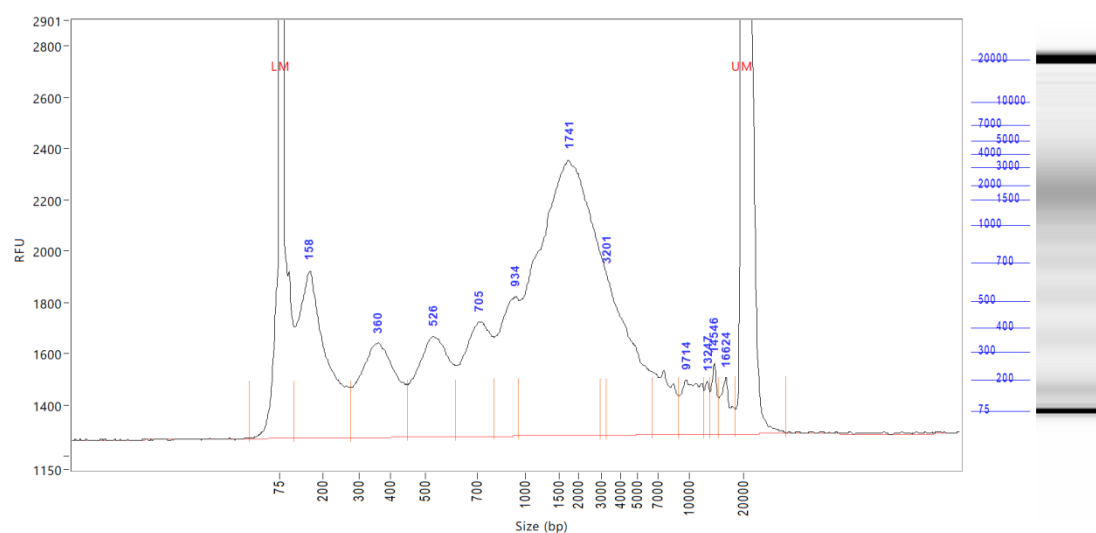
## Supplementary Figures: Experimental replicates and supporting experiments

Supplementary figures representing the results of the **Fragment Analyzer DNF-930-33 (75-20000 bp)** assays. (S1) Ladder; (S2-S7) Biological replicate 1; and (S8-S12) Biological replicate 2.

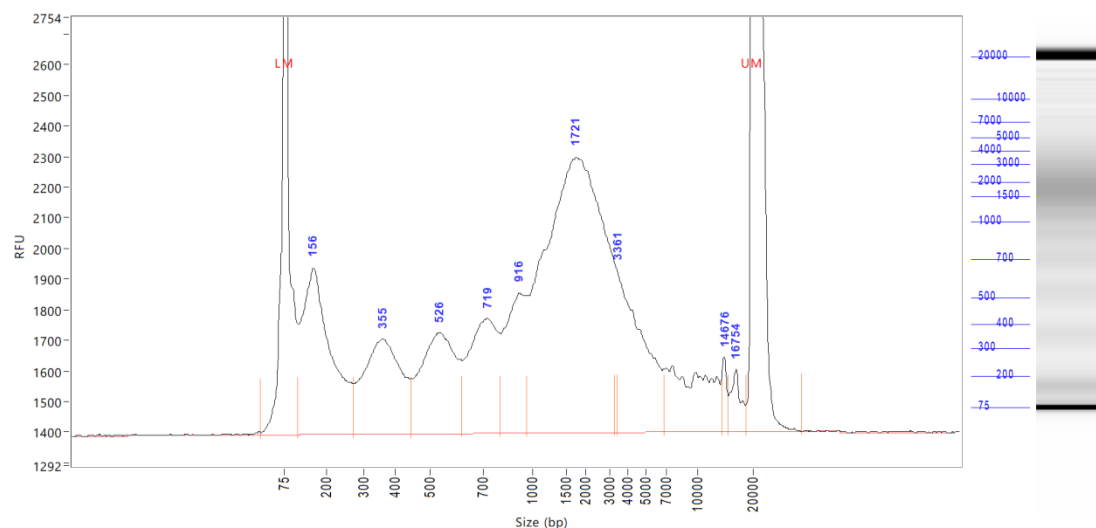
**S1**



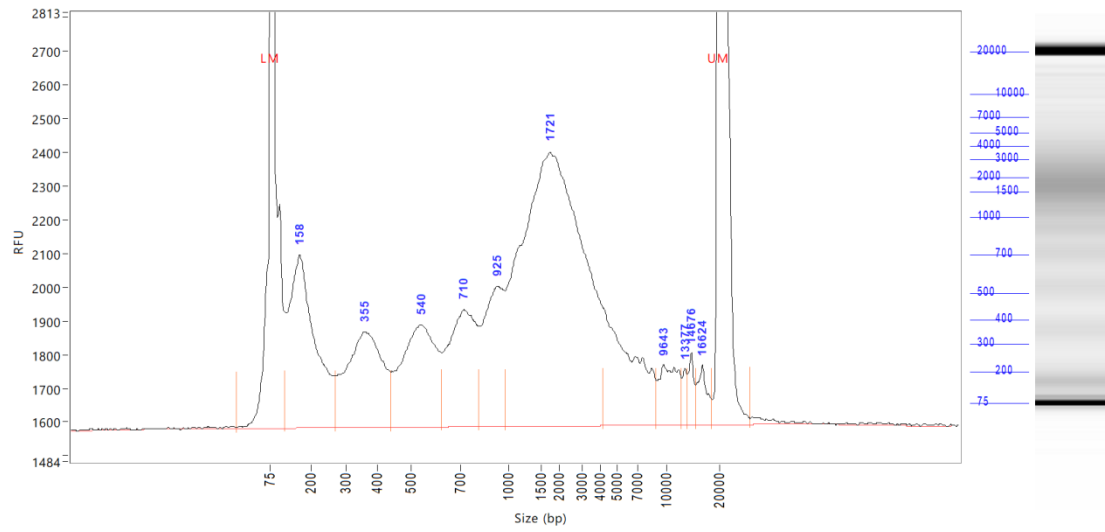
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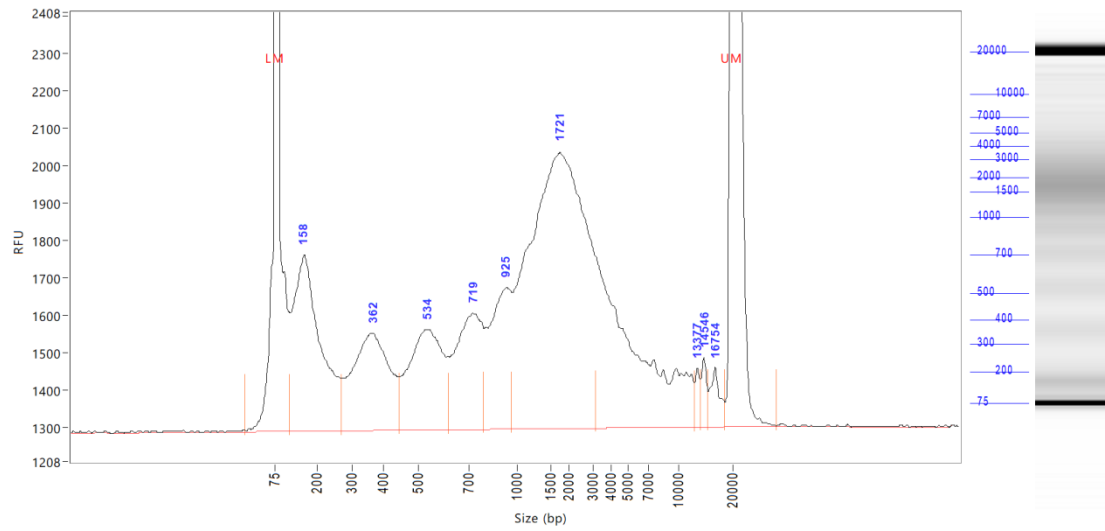
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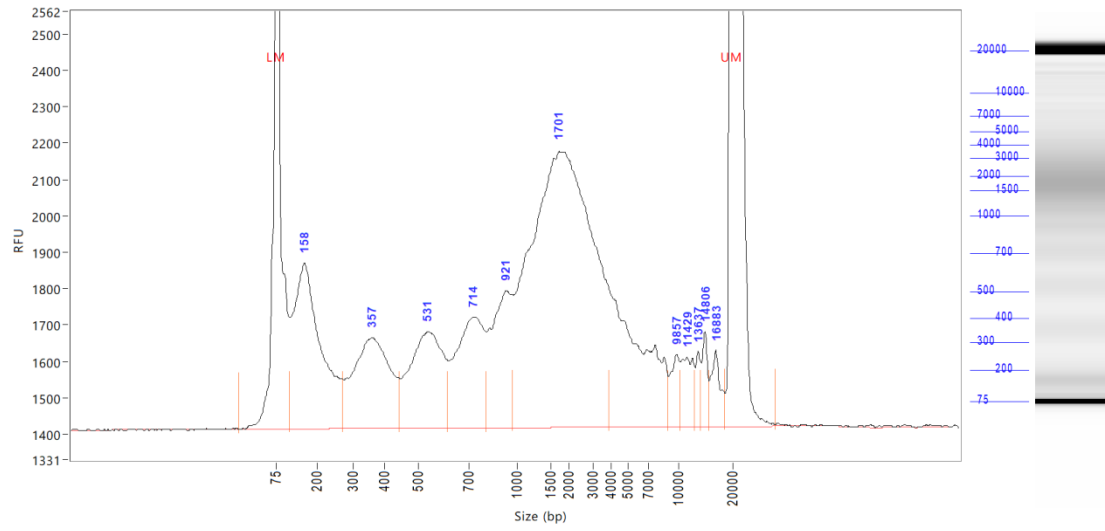
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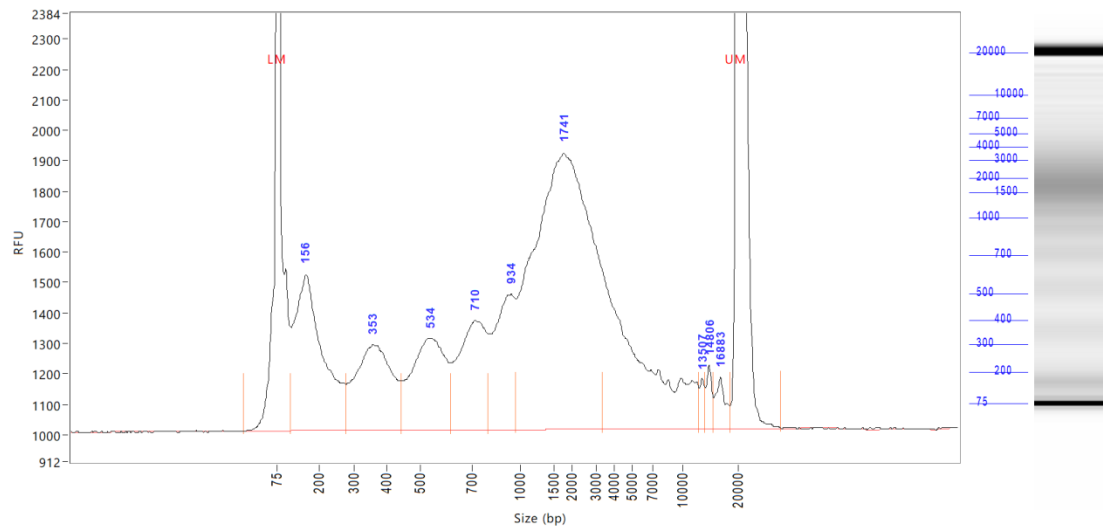
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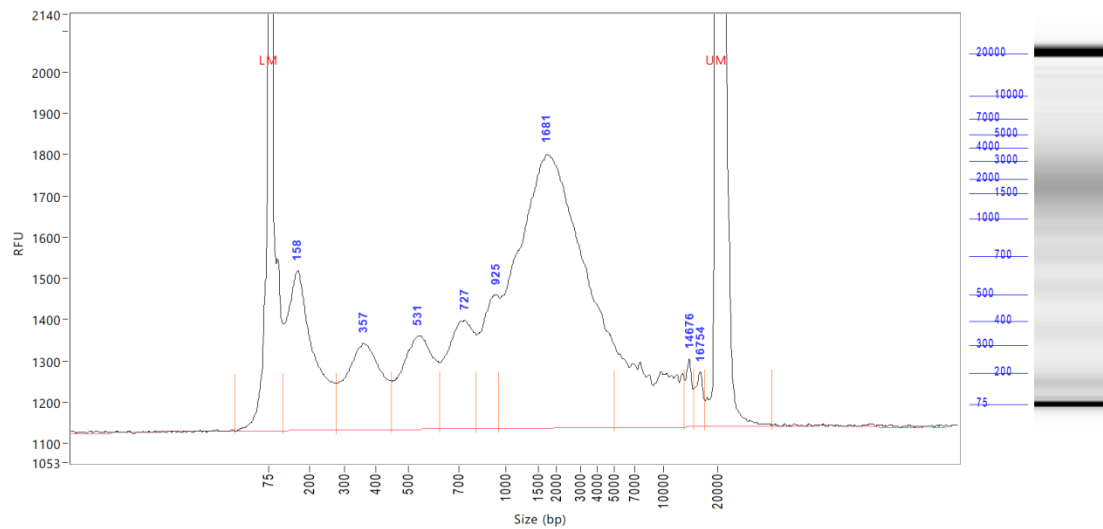
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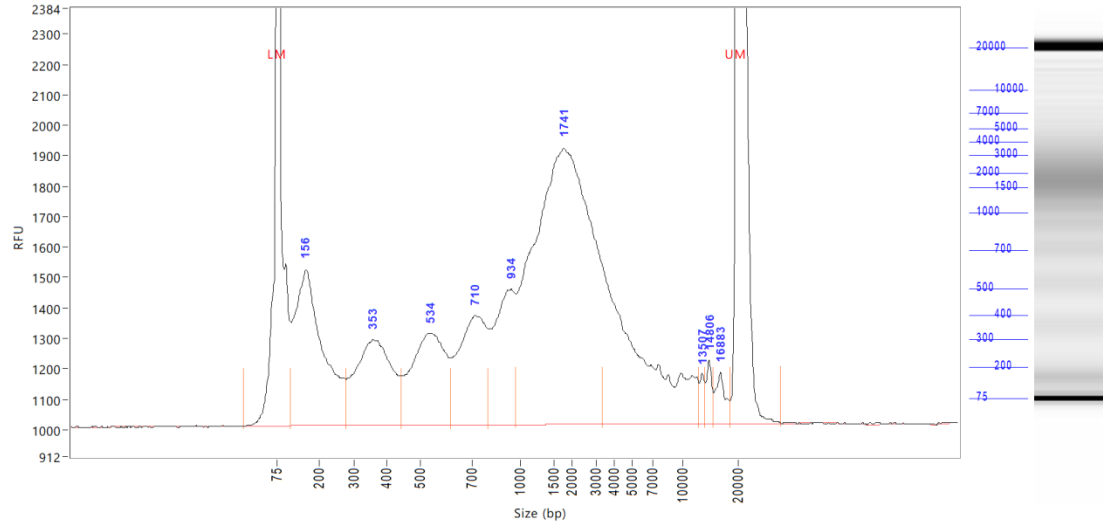
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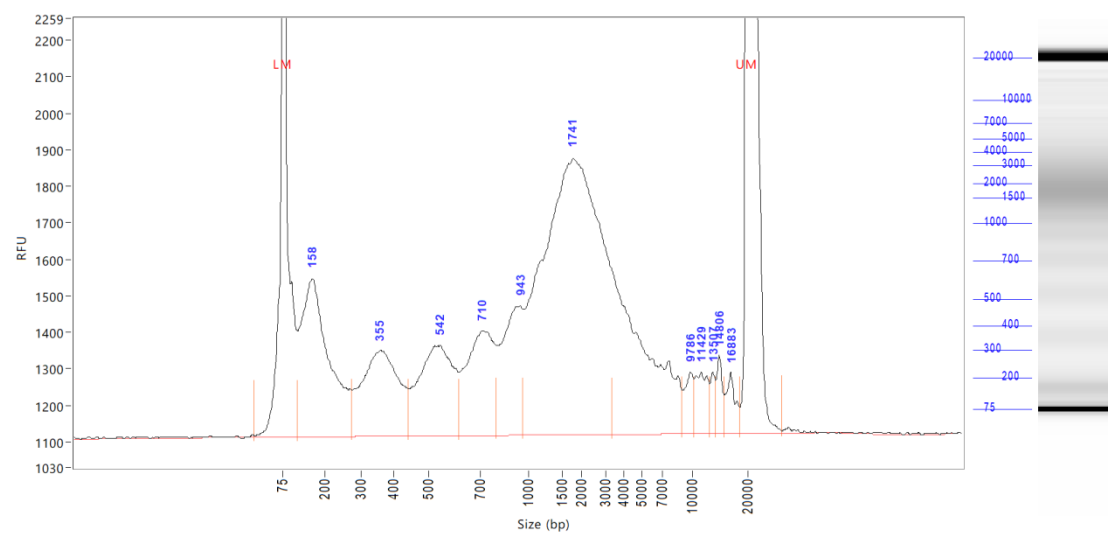
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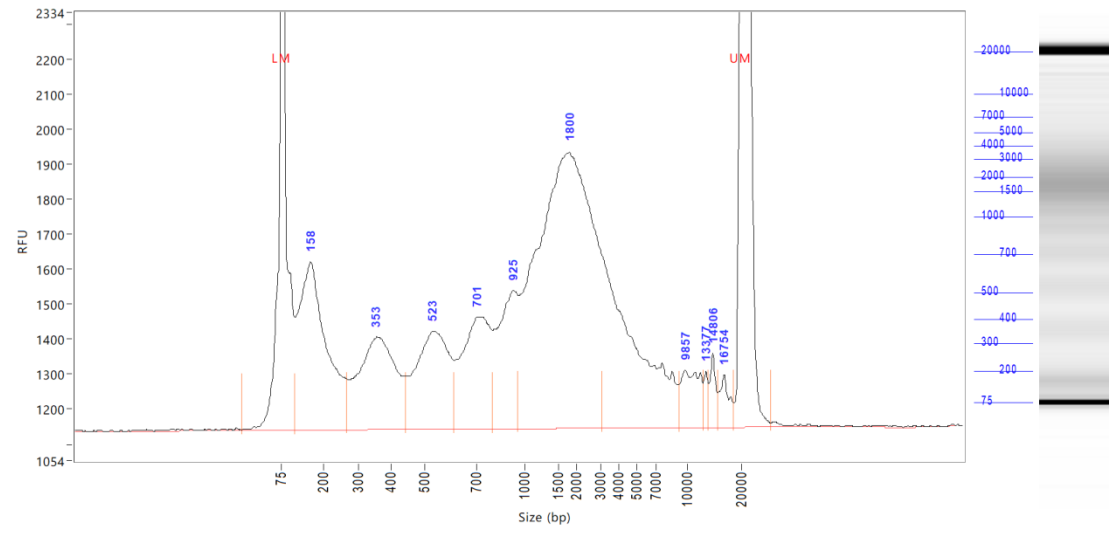
S9



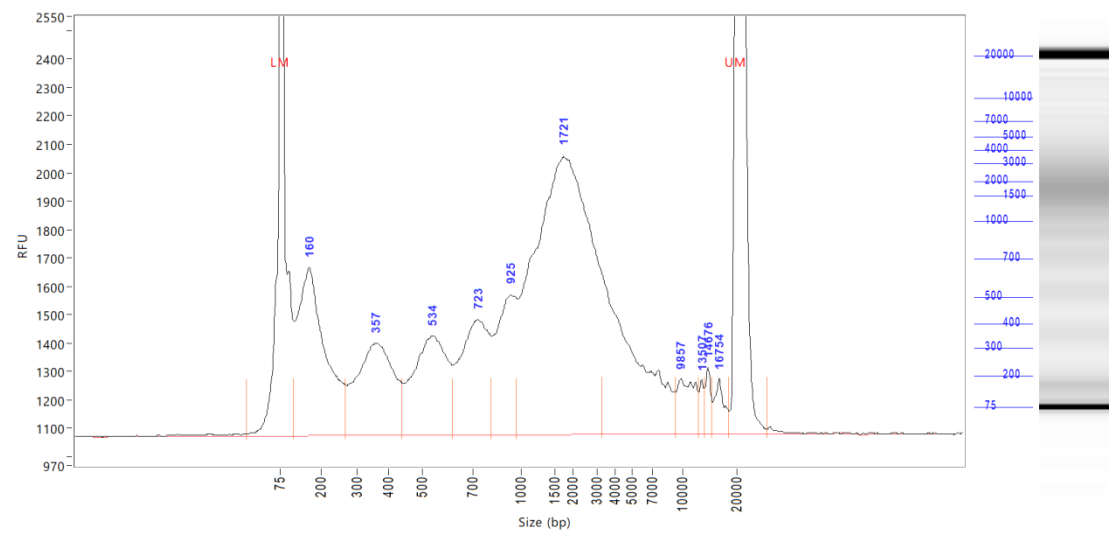
S10



S11

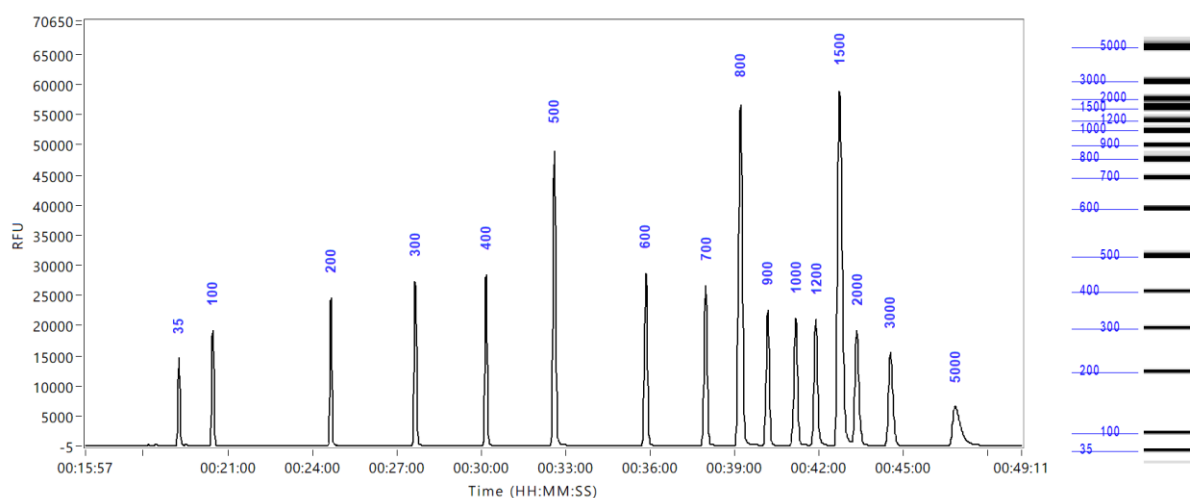


S12

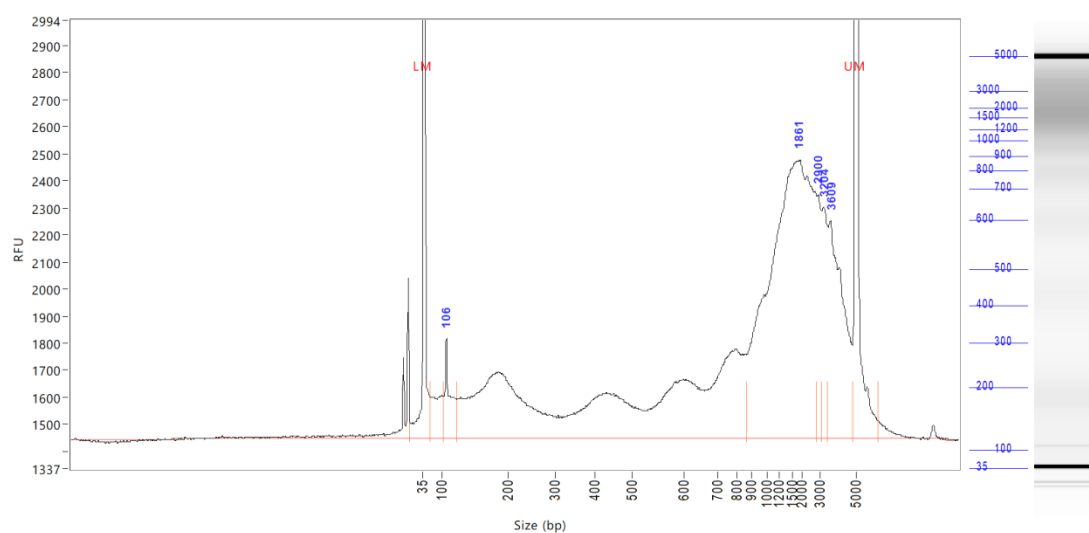


Supplementary figures representing the results of the **Fragment Analyzer DNF-915-33 (35-5000 bp)** assays. (S13) Ladder; (S14-S19) Biological replicate 1; and (S20-S24) Biological replicate 2.

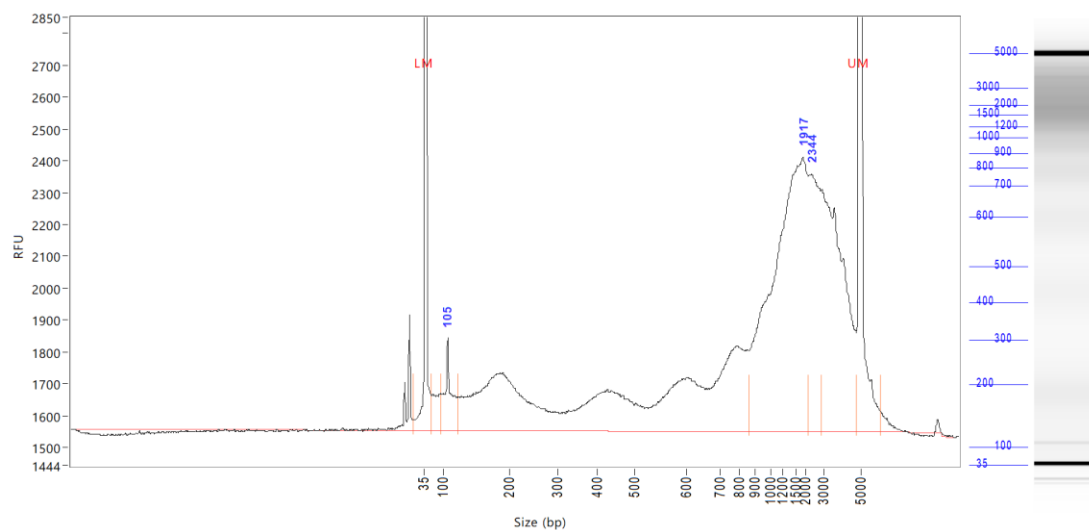
### S13



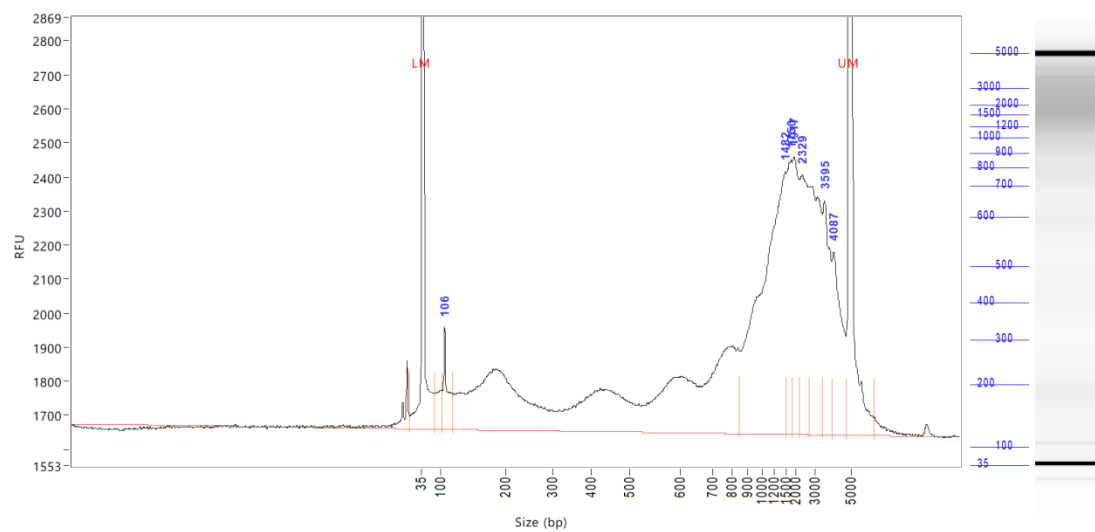
### S14



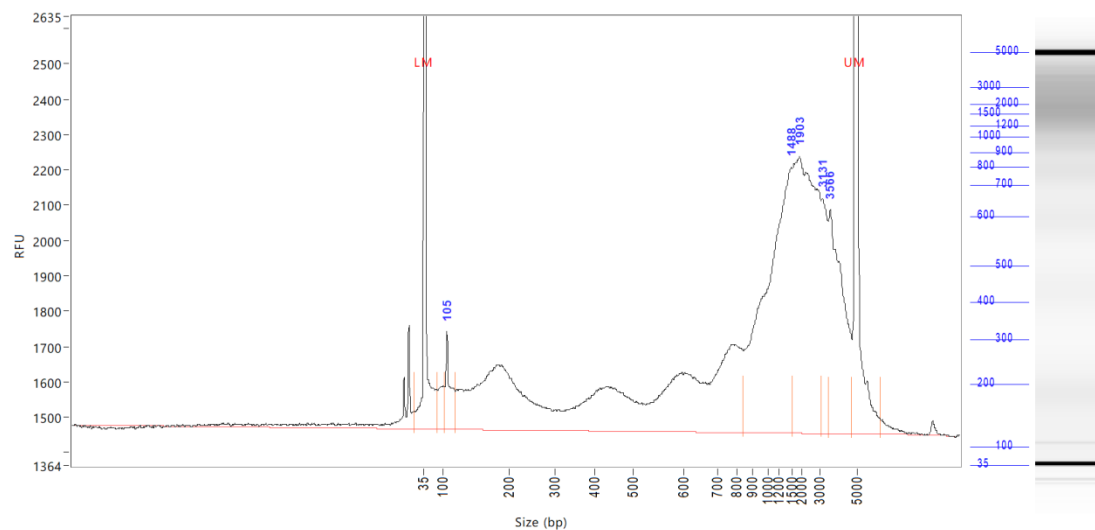
### S15



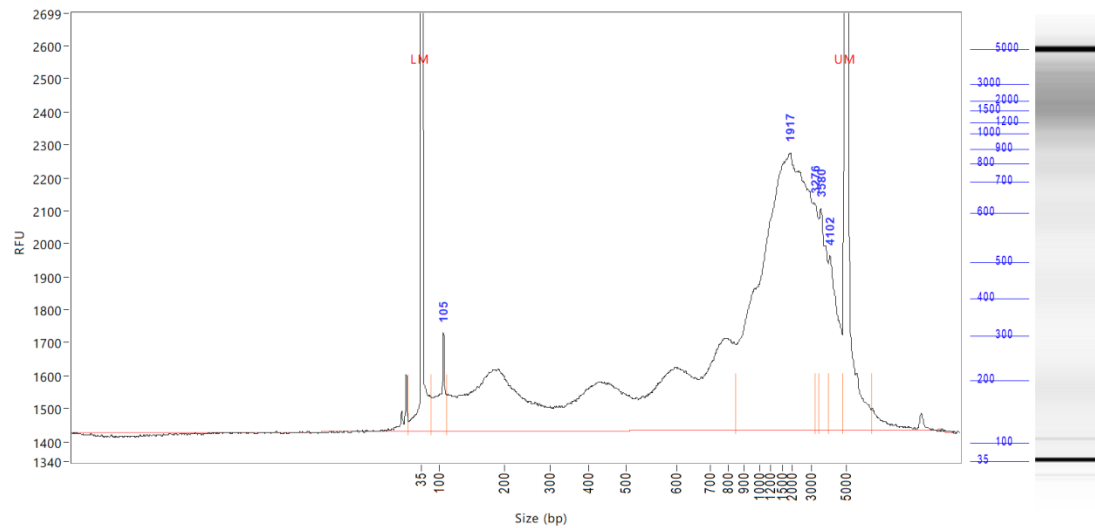
**S16**



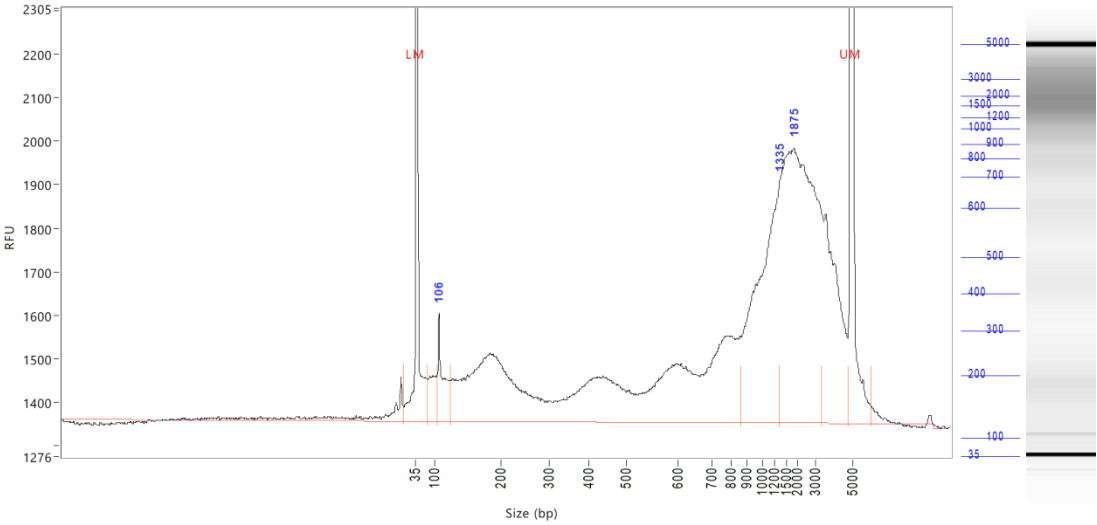
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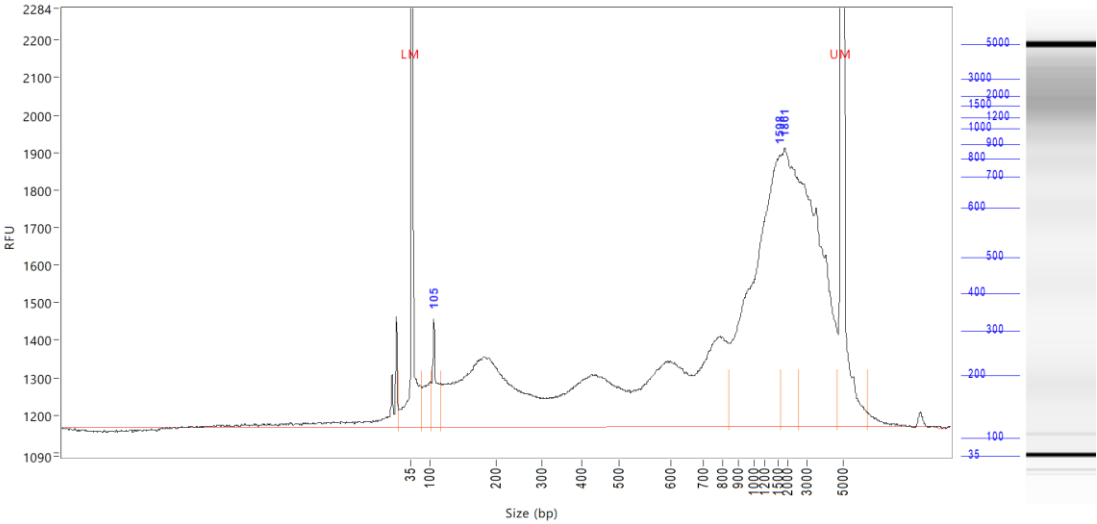
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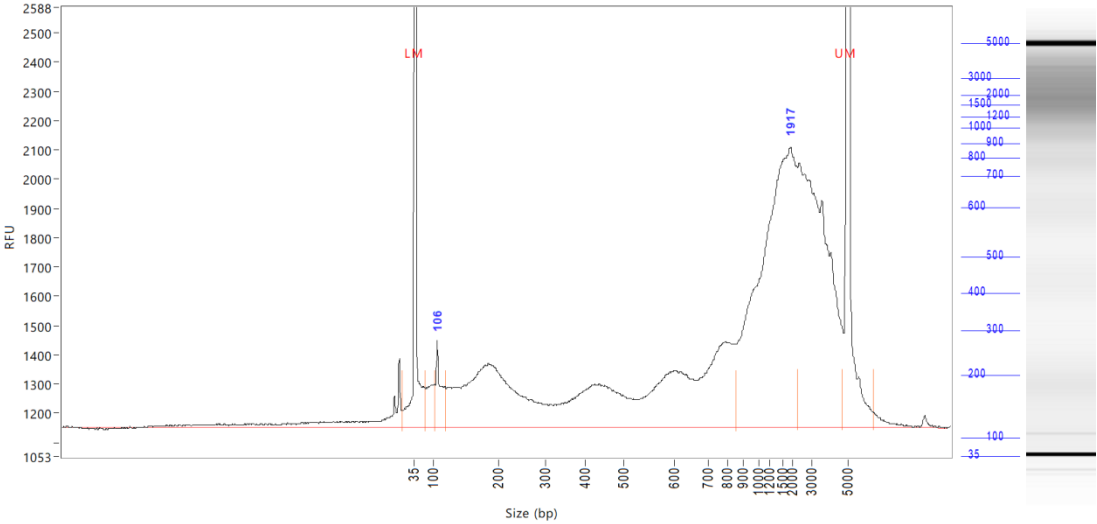
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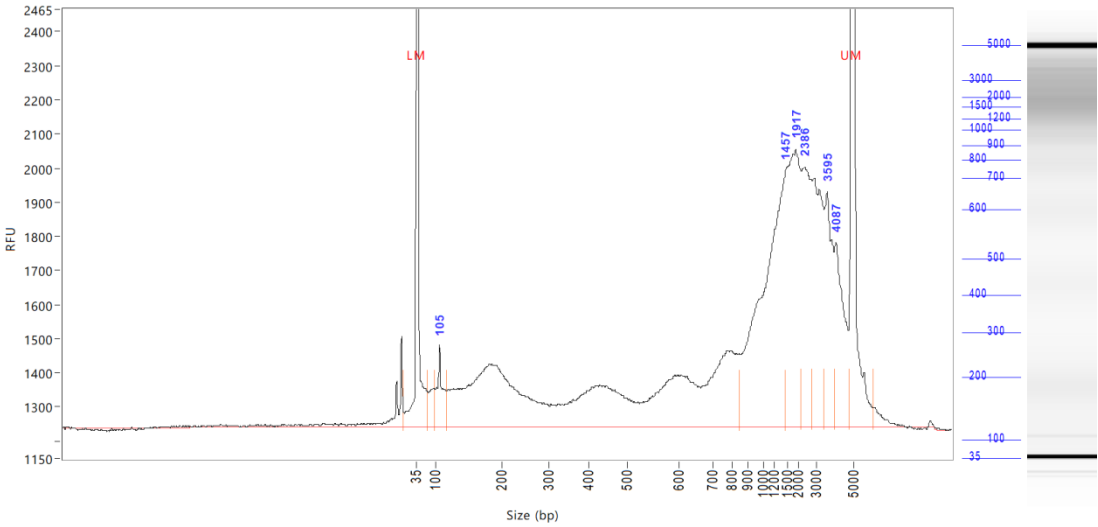
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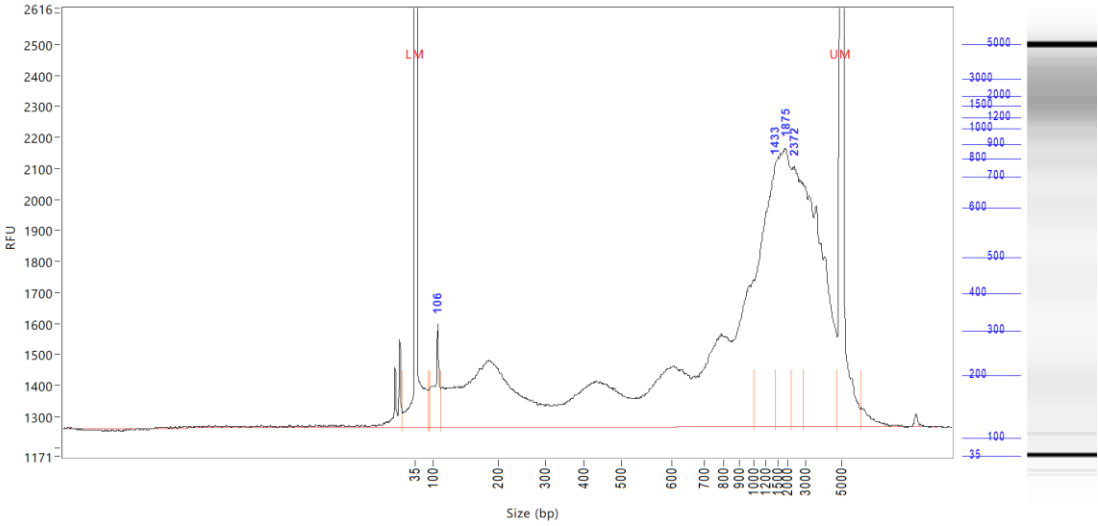
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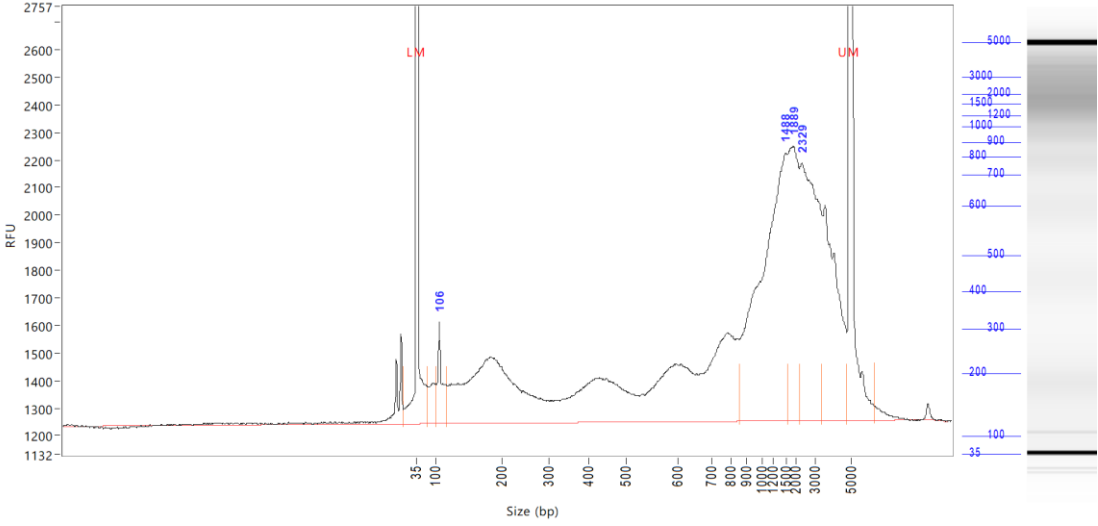
S22



S23



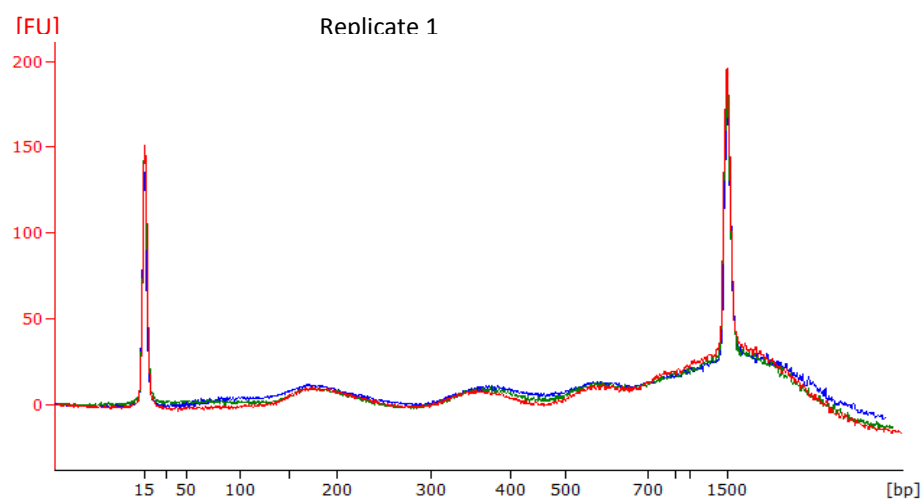
S24



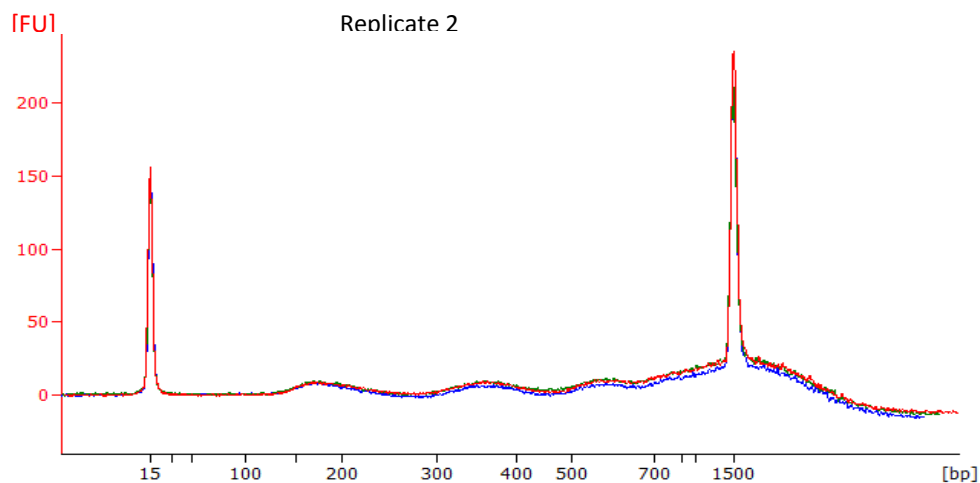


Supplementary figures representing the results of the **Bionalyzer DNA 1000 (25-1000 bp)** assay.  
(S25) Biological replicate 1; (S26) Biological replicate 2; and (S27) Biological replicate 3.

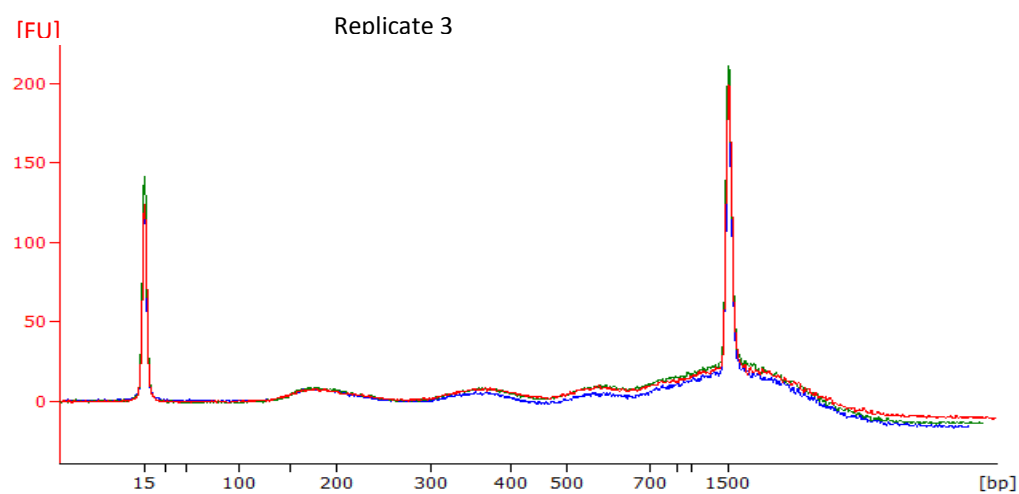
**S25**



**S26**

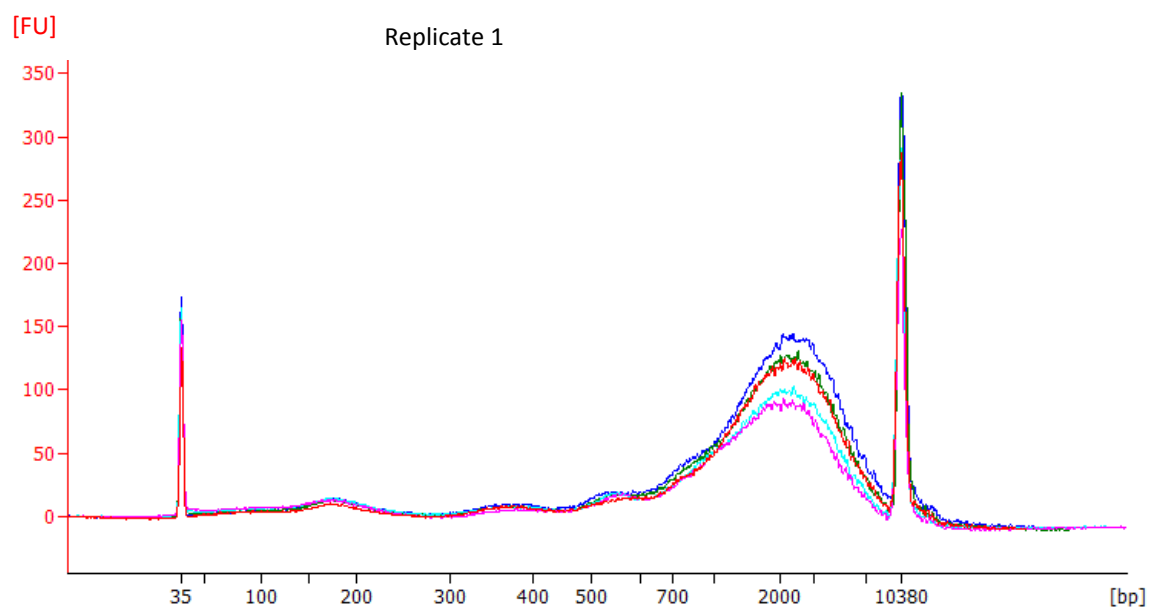


**S27**

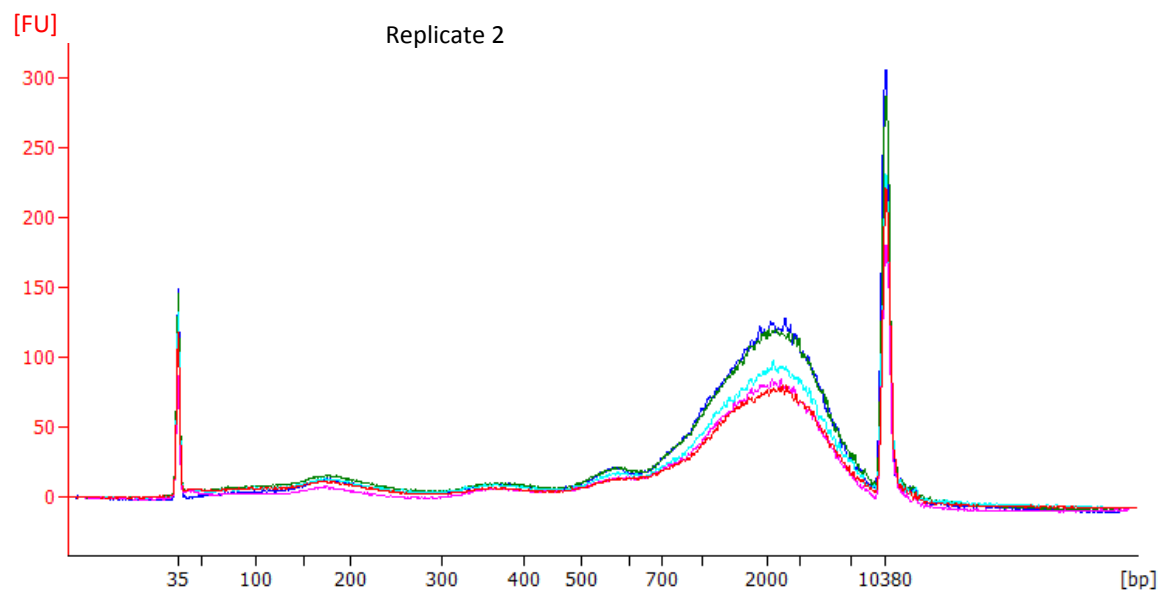


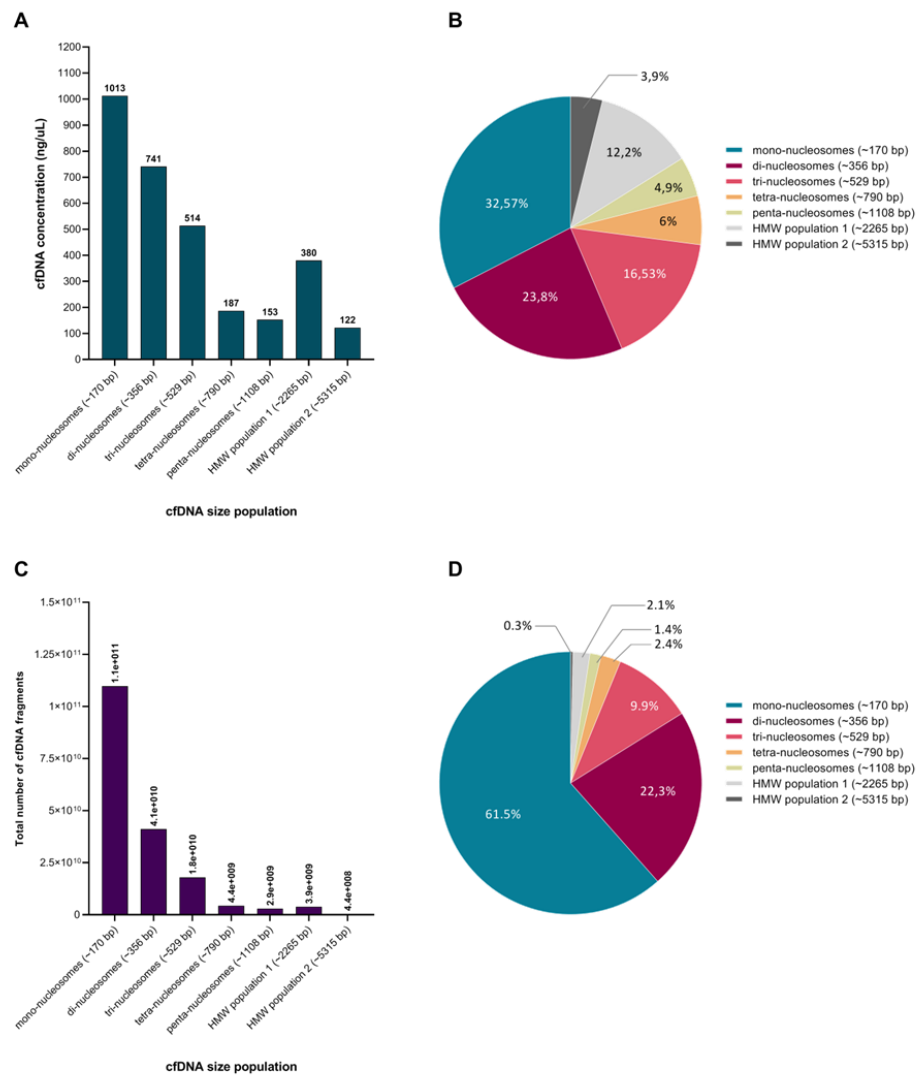
Supplementary figures representing the results of the **Bionalyzer High Sensitivity DNA Assay (50 – 7000 bp)**. (S28) Biological replicate 1; and (S29) Biological replicate 2.

## S28



## S29





**Supplementary Figure S30.** Characterization of differently sized cell-free DNA (cfDNA) populations separated by agarose gel electrophoresis. Summary of the (A) average concentration, (B) relative contribution (%) in terms of concentration, (C) copy number (total number of cfDNA fragments) frequency distribution, and (D) relative contribution (%) in terms of copy number of the differently sized cfDNA populations present in the cell culture supernatant as determined by agarose gel electrophoresis coupled with the Agilent Bioanalyzer HS DNA assay. The total number of individual fragments that constitute each of the differently sized cfDNA populations (copy number) was determined as follows: (i) calculate the total number of base pairs that constitute each size population by dividing the average concentration of the population by the theoretical weight of 1 base pair ( $650 \text{ Da} = 1.67 \times 10^{-24} \text{ grams}$ ), and (ii) divide the total number of base pairs by the corresponding modal length of the population.