



Innovating Epigenetics Solutions

Reliably shear DNA 3 kb to 75 kb

Megaruptor[®], the ultimate solution for long read sequencing library preparation

The Megaruptor[®] 2 was designed to provide the best experience with the fragmentation of DNA. Shearing performance is independent of the source, concentration, temperature, or salt content of a DNA sample. Our user-friendly interface allows for two samples to be processed sequentially without additional user input and without cross-contamination.

Megaruptor's key advantages over competing technologies and devices

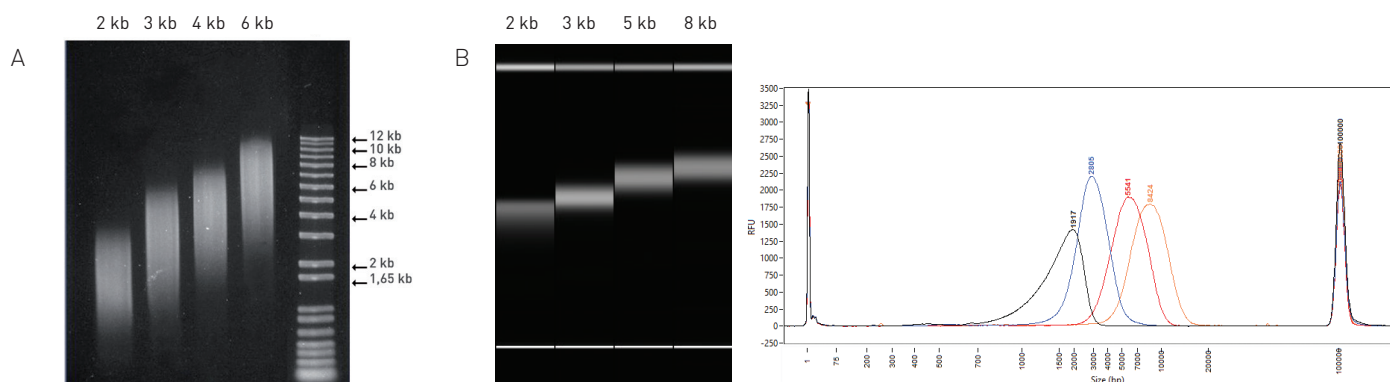
- Achieve a tight distribution of fragment lengths, easily tuneable to between **3 kb and 75 kb**
- Obtain high-quality libraries for PacBio[®], Oxford Nanopore[®], Illumina[®], and Ion Torrent[™] platforms
- Alleviate clogging issues typically encountered with single-orifice devices
- Process 2 samples in series with walk-away capability
- Eliminate cross-contamination with disposable element



www.diaenode.com Please contact us for more information

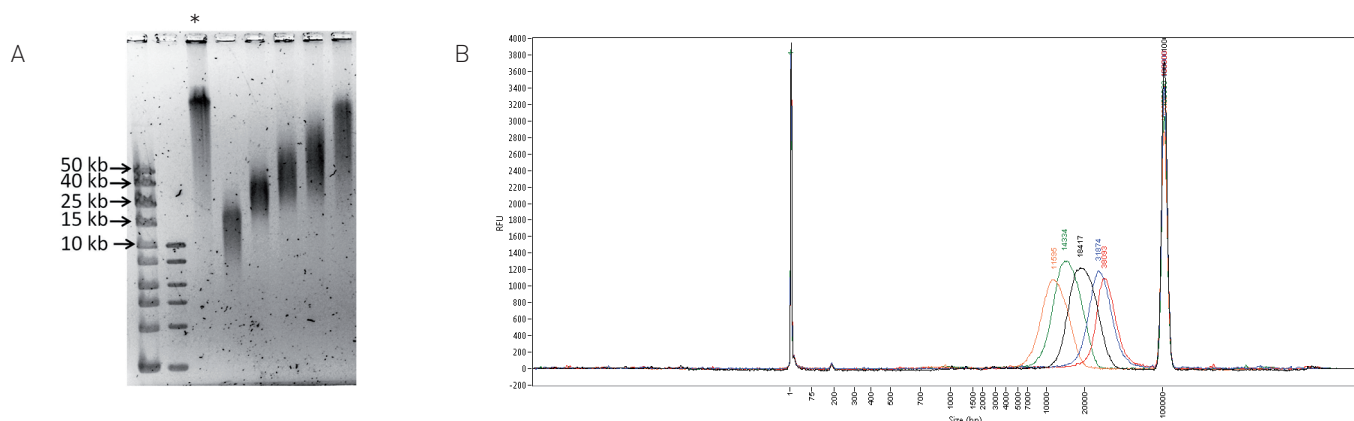
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Reproducible and narrow size distribution



Reproducible and narrow DNA size distribution with Megaruptor® using short fragment size Hydropores

Validation using two different DNA sources and two different methods of analysis. **A:** Shearing of lambda phage genomic DNA (20 ng/μl; 150 μl/sample) sheared at different speed settings and analyzed on 1% agarose gel. **B:** Fragment Analyzer™ profiles of human genomic DNA (25 ng/μl; 200 μl/sample) sheared at different software settings of 2 (contact us for this size), 3, 5 and 8 kb. (Standard Sensitivity Large Fragment Analysis Kit ; Advanced Analytical Technologies, Inc. was used for separation and fragment sizing).



Demonstrated shearing to fragment sizes between 10 kb and 75 kb with Megaruptor® using long fragment size Hydropores

Image shows DNA size distribution of human genomic DNA sheared with long fragment Hydropores. **A:** DNA was analyzed by pulsed field gel electrophoresis (PFGE) in 1% agarose gel and a mean size of smears was estimated using Image Lab 4.1 software. **B:** Fragment Analyzer™ profiles of human genomic DNA (25 ng/μl; 200 μl/sample) sheared at different software settings of 10, 15, 20, 30 and 40 kb. (High Sensitivity Large Fragment Analysis Kit; Advanced Analytical Technologies, Inc. was used for separation and fragment sizing).

* indicates unsheared DNA

Description	Cat. No.	Format
Megaruptor® 2	B06010002	1 unit
Hydropore — short	E07010001	10 pc
Hydropore — long	E07010002	10 pc
Hydro Tubes	C30010018	50 pc