



Innovating Epigenetics Solutions

## Reliably shear DNA 3 kb to 75 kb

Megaruptor<sup>®</sup>, the ultimate solution for long read sequencing library preparation

The Megaruptor<sup>®</sup> 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

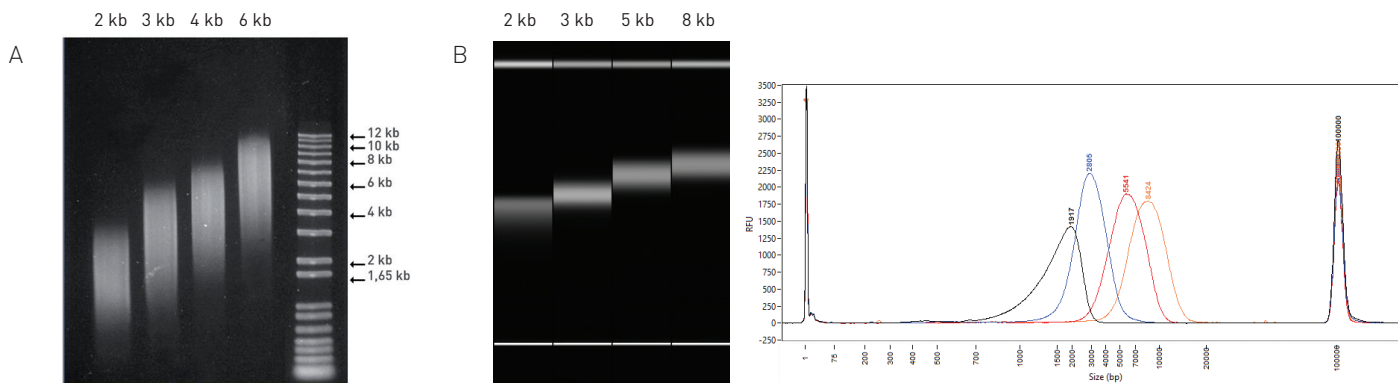
- Achieve a tight distribution of fragment lengths, easily tuneable to between **3 kb and 75 kb**
- Obtain high-quality libraries for PacBio<sup>®</sup>, Oxford Nanopore<sup>®</sup>, Illumina<sup>®</sup>, and Ion Torrent<sup>™</sup> platforms
- Alleviate clogging issues typically encountered with single-orifice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



[www.diagenode.com](http://www.diagenode.com) Please contact us for more information

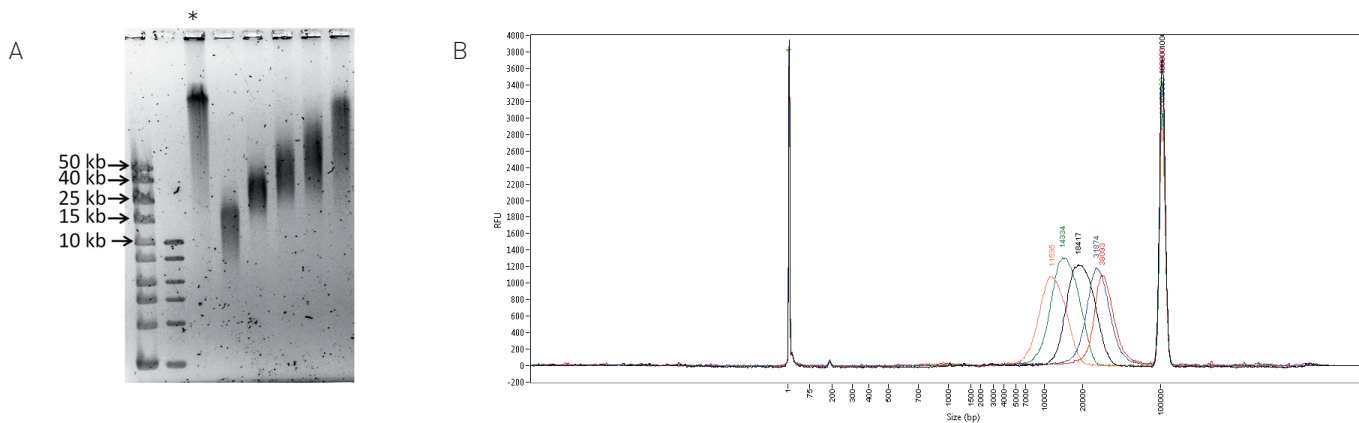
Europe Diagenode sa / LIEGE SCIENCE PARK // Rue du Bois Saint-Jean, 3 // 4102 Seraing [Ougrée] // Belgium // Phone: (+32) 4 364 20 50 // E-mail: [info@diagenode.com](mailto:info@diagenode.com)  
USA Diagenode Inc. / 400 Morris Avenue, Suite 101 // Denville, NJ 07834 // USA // Phone: (+1) 862 209-4680 // Mail: [info.na@diagenode.com](mailto:info.na@diagenode.com)

## 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