



Today: Shear DNA with unmatched accuracy. Tomorrow: End-to-end sample prep
One instrument – Multiple applications

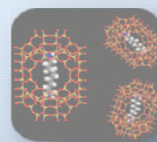
Microsonics ST30 Personal DNA Sample Prep System with its on-board centrifuge represents a whole new approach to preparing DNA samples. Microsonics' proprietary Bulk Lateral Ultrasonic (BLU)™ technology is a highly controllable form of ultrasound equally capable of gentle mixing as shearing DNA – all in standard low-cost Matrix 2D- barcoded storage tubes.

ST30's first application offers unmatched accuracy and unmatched efficiency in DNA shearing:

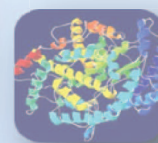
- Produces high quality high yield of fragments – validated protocols 300bp to 1.5 Kb
- Processes up to 8 samples in single batch
- Uses inexpensive Matrix 2D barcoded tubes – sample tracking via onboard barcode reader
- Built in centrifuge results in tight distribution and clean fragments that yield more efficient sequencing
- Select independent protocol for each sample via on-board touch screen
- Protocols optimized for 50µl of starting sample
- No external chiller, PC or degassed/ultrasonic grade water required
- Walk away capability - Email notification when processing complete



Cell lysing



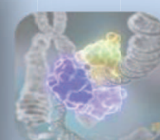
Purification



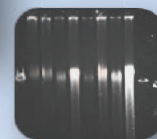
Enzymatic treatment



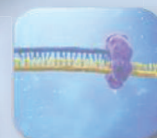
End repair



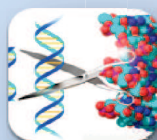
Adaptor ligation



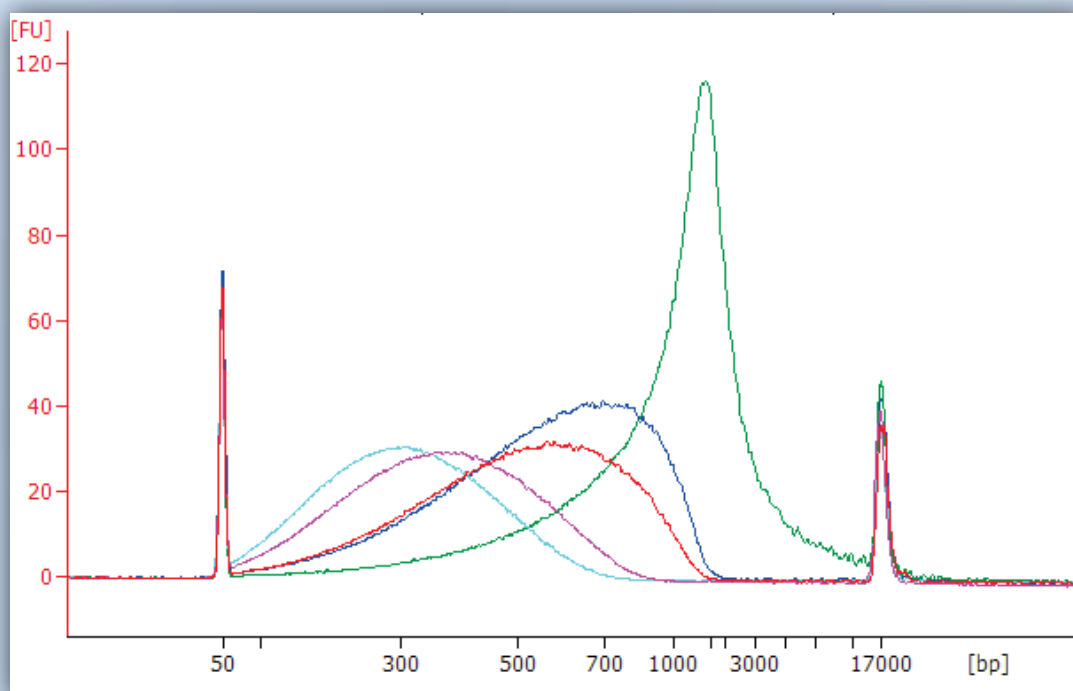
Target enrichment



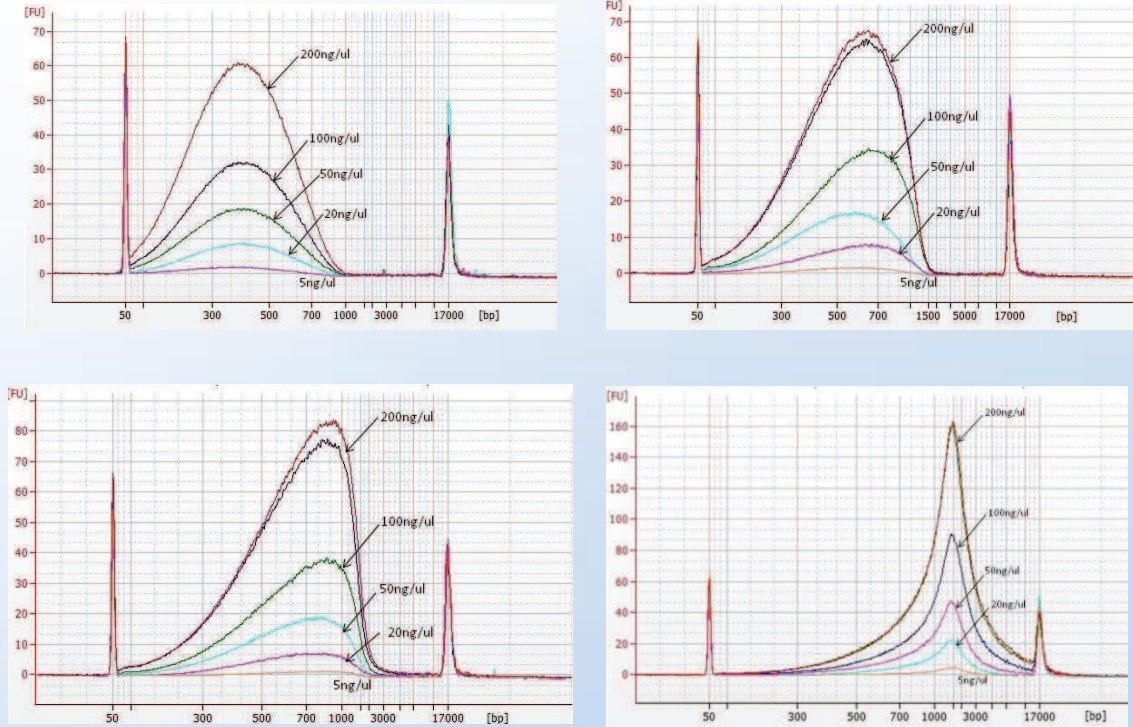
Sono PCR



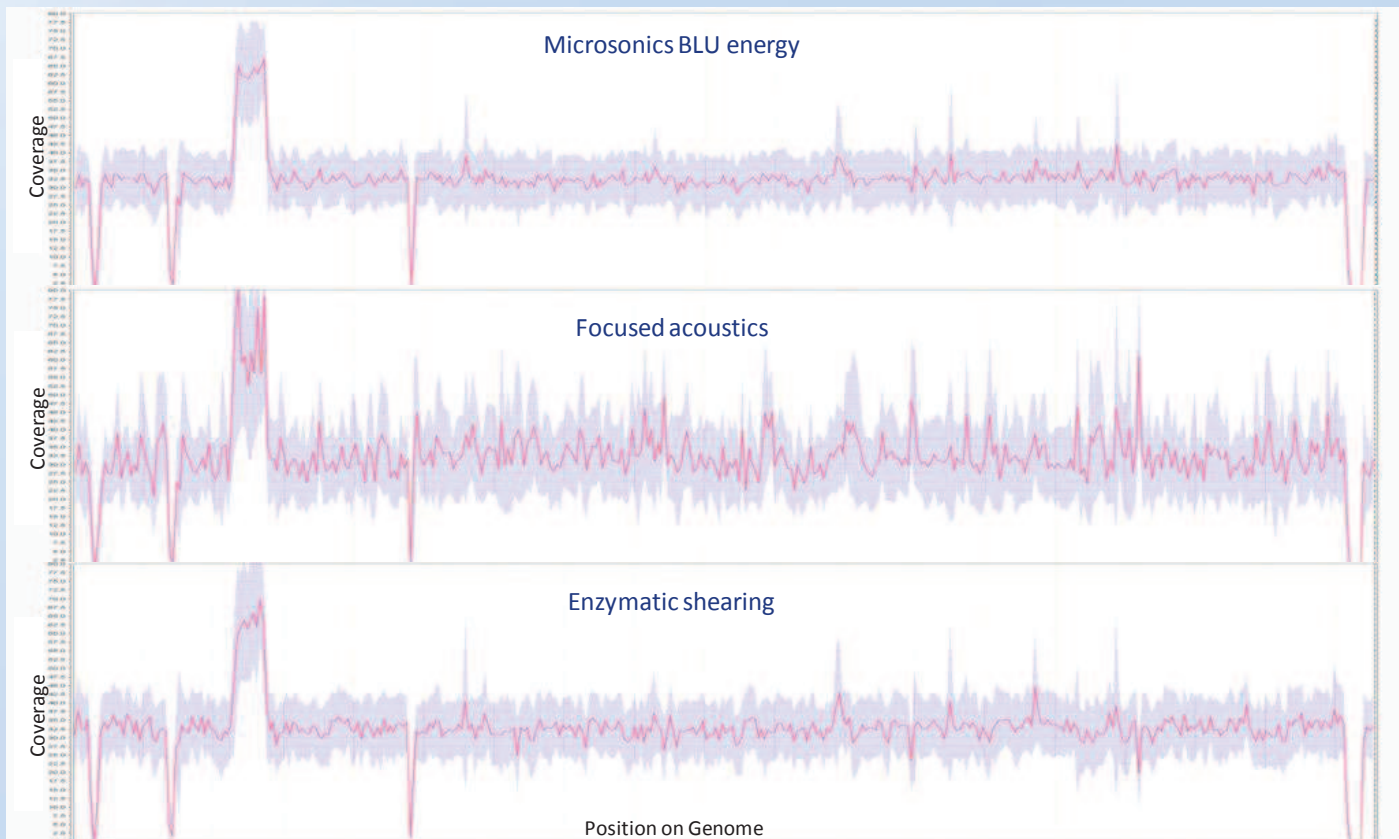
DNA shearing



Human DNA samples sheared to target fragment sizes of 300 bp, 400 bp, 600 bp, 800 bp and 1.5 Kb by specifying the "Dial a DNA Fragment" settings.



Concentration independent shearing target size at five different sample concentrations



Sequencing coverage across reference genome using different shearing methods