

# truChIP™ Chromatin Shearing Kits

truChIP kits include reagents, consumables, and validated protocols to process a wide variety of cell and tissue types. truChIP kits are optimized for high performance with Covaris industry leading AFA™ instruments.

## WHY truChIP?

- Unprecedented control of shearing size range and epitope integrity
- Greater availability of epitopes for Immunoprecipitation
- Significantly less starting material required
- Consistent results from difficult cells and tissues
- Significant reduction in detergent
- High reproducibility from sample-to-sample, day-to-day, lab-to-lab

FRESH TISSUE  
START POINT

### The Covaris ChIP Process—From Tissue / Cultured Cells to Sheared Chromatin

- Snap freeze fresh tissue sample

- Dry pulverize sample into a fine powder

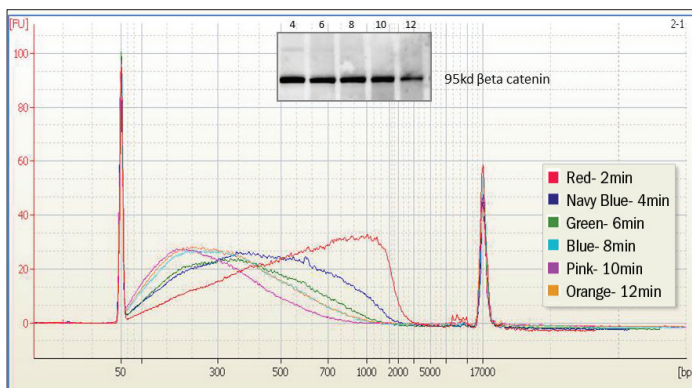
CULTURED CELL  
START POINT

- Prepare sample for extraction with **Covaris truChIP Kit**

- Shear chromatin with highly controlled AFA acoustic energy
- Obtain reproducible shearing results that your assay can rely on

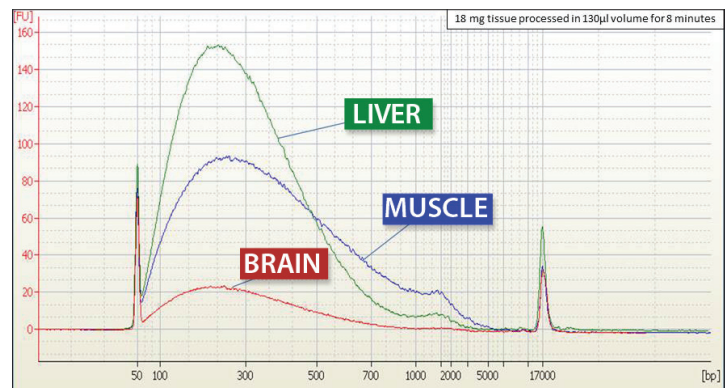
## Shearing Length Control – Unprecedented Performance

Nuclei from  $3 \times 10^6$  HeLa cells processed in 130ul volume in microTubes



- Data demonstrates controlled shear length selection based on shearing duration.
- An 8 to 10 minute shear time with Covaris AFA is optimal for most sample types.

Consistent shearing across tissue types





- Chart demonstrates that truChIP performs well even with difficult tissue types such as brain.
- No size selection required. Sample applied directly to Bioanalyzer.

**CUSTOMER FEEDBACK**

"The ChIP results obtained using Covaris shearing technology are the most sensitive and novel that I have ever seen... Additionally, it has preserved epitopes that we never saw before." — FDA Scientist

**THE COVARIS SOLUTION:**

 Key Features	 Benefits
<ul style="list-style-type: none"> <li>■ Comprehensive ChIP Shearing Kits</li> </ul>	<ul style="list-style-type: none"> <li>✓ Covaris provides key technologies and consumables for accurate and controlled chromatin shearing performance (from tissue through shearing).</li> </ul>
<ul style="list-style-type: none"> <li>■ Flexible starting materials</li> </ul>	<ul style="list-style-type: none"> <li>✓ With <i>truChIP</i>, Chromatin shearing can start with either tissue samples or cell cultures and scales from a few thousand cells to over 5 million cells.</li> </ul>
<ul style="list-style-type: none"> <li>■ Standard / proven protocols</li> </ul>	<ul style="list-style-type: none"> <li>✓ <i>truChIP</i> protocols are optimized and tested to provide superior shearing performance.</li> </ul>
<ul style="list-style-type: none"> <li>■ AFA shearing technology</li> </ul>	<ul style="list-style-type: none"> <li>✓ AFA™ Adaptive Focused Acoustic™ technology enables precise and reproducible chromatin shearing in a closed vessel, isothermal, non-contact process.</li> </ul>
<ul style="list-style-type: none"> <li>■ Protocols, reagents and consumables optimized for your ChIP application</li> </ul>	<ul style="list-style-type: none"> <li>✓ Provides highest quality, reliable chromatin shearing performance.</li> </ul>
<ul style="list-style-type: none"> <li>■ CryoPrep dry pulverization- ideal for tissue ChIP applications</li> </ul>	<ul style="list-style-type: none"> <li>✓ CryoPrep process rapidly fractures tissue samples into fine powder.</li> <li>✓ No molecular damage due to the introduction of heat or chemicals.</li> <li>✓ No sample loss.</li> </ul>

**ORDERING INFORMATION**

Product Description	PN	Cell Number/Mass
<i>truChIP</i> High Cell Chromatin Shearing Kit with non-ionic buffer	520075	1 X 10 <sup>8</sup> cells
<i>truChIP</i> High Cell Chromatin Shearing Kit with SDS buffer	520076	1 X 10 <sup>8</sup> cells
<i>truChIP</i> Low Cell Chromatin Shearing Kit with non-ionic buffer	520084	less than 1 X 10 <sup>8</sup> cells
<i>truChIP</i> Low Cell Chromatin Shearing Kit with SDS buffer	520085	less than 1 X 10 <sup>8</sup> cells
<i>truChIP</i> Tissue Chromatin Shearing Kit	520083	less than 50mg

**Contact Information**

Tel: +1 781-932-3959  
 Fax: +1 781-932-8705  
 Email: info@covarisinc.com  
 Web: www.covarisinc.com

**USA Headquarters**

Covaris, Inc.  
 14 Gill Street, Unit H  
 Woburn, Massachusetts 01801-1721 USA

INFORMATION SUBJECT TO CHANGE WITHOUT NOTICE | FOR RESEARCH USE ONLY  
 NOT FOR USE IN DIAGNOSTIC PROCEDURES USA PRINTED IN USA  
 COPYRIGHT 1999-2011 COVARIS, INC. | PN -CV.CHIP KIT.4.11.B