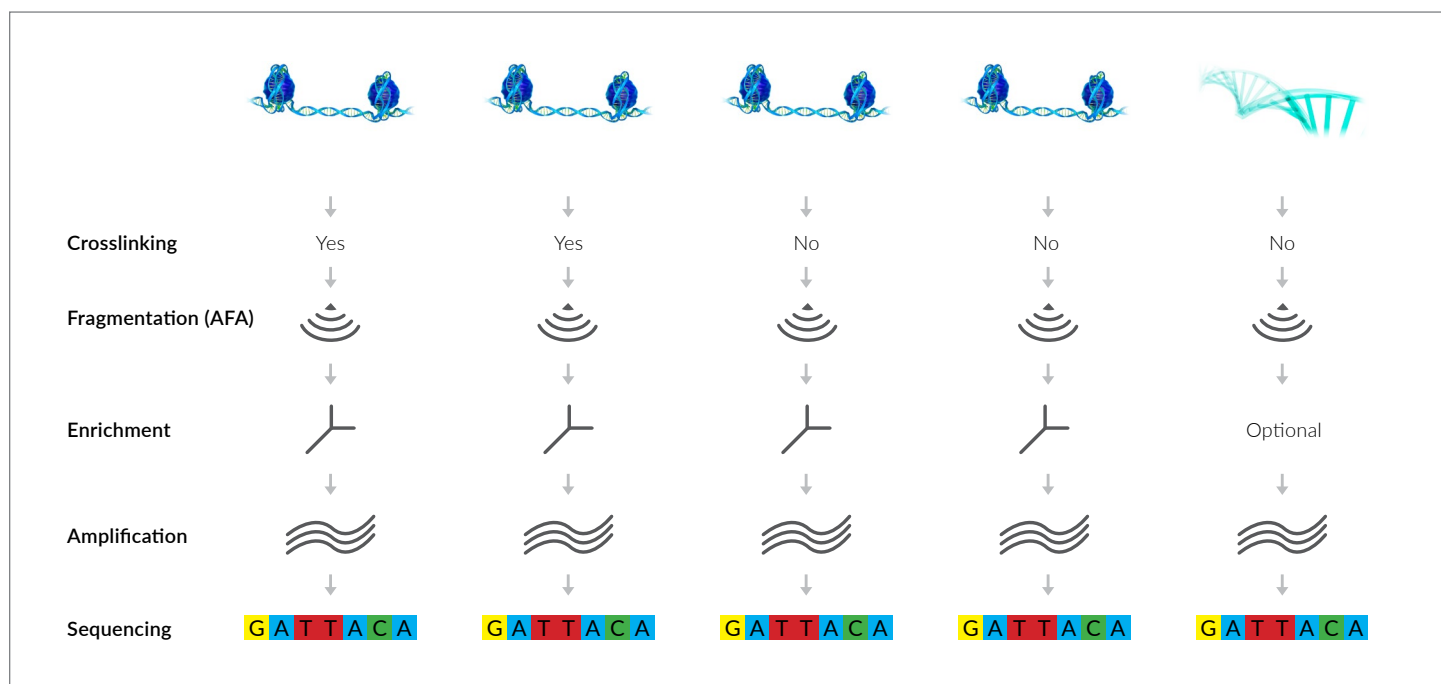




COMPREHENSIVE EPIGENOMIC SAMPLE PREP WORKFLOW SOLUTIONS

Robust and scalable sample preparation solutions for epigenomic applications are critical for enabling rapid biological discoveries. Using the Adaptive Focused Acoustics® (AFA®) technology, Covaris has standardized the critical steps of multi-step workflows, such as ChIP-Seq with truChIP® and cryoPREP®. For DNA methylation analysis, AFA has been established as the most reliable fragmentation method and is part of [NuGEN's Ovation®](#) and [Agilent's SureSelectXT Methyl-Seq](#) protocols to profile 5-methylcytosine (5mC) and 5-hydroxymethylcytosine (5hmC) using oxidative bisulfite sequencing (oxBS-Seq).



Discover true biology within the highly dynamic cell

- Process up to 96 samples per run for high-throughput applications
- Increase laboratory efficiencies using Covaris optimized reagents and protocols
- Rapidly establish protocols for precious clinical tissues, primary cells, and FACS sorted cells
- Prepare samples for other chromatin architecture applications, such as Hi-C and Hi-ChIP

Let's stay engaged!

Contact us to learn about demos, upcoming workshops, and seminars near you! Visit our website to learn about new products, access protocols, and other helpful resources. Follow us on LinkedIn, Facebook, Twitter, and YouTube.



Product Number	Product	Description
Low Cell ChIP 520156	truChIP Ultra-Low Chromatin Shearing Kit with formaldehyde (50)	Includes reagents required to process low inputs (<100k cells) for profiling histone modifications and transcription factor binding events. AFA processing tubes are sold separately.
FF Tissue ChIP 520154	truChIP Chromatin Shearing Kit with formaldehyde (50)	Includes reagents required to process 1 to 30 M cells/sample for profiling histone modifications and transcription factor binding events. AFA processing tubes are sold separately.
FF Tissue ChIP 520237	truChIP Chromatin Shearing Tissue Kit with Formaldehyde (6)	Includes reagents and consumables required to process both low tissue mass inputs (20 to 50 mg) and high tissue mass inputs (up to 120 mg). AFA processing tubes are sold separately.
Native ChIP 520256	truChIP native Chromatin Shearing Kit (25)	Includes reagents required to process non-crosslinked mammalian cells cultured in suspension or an adherent monolayer for profiling histone modifications. AFA processing tubes are sold separately.
FFPE ChIP 520257	truChIP FFPE Chromatin Shearing Kit (25)	Includes reagents and 25 AFA tubes required to remove paraffin from FFPE tissues and prepare soluble chromatin for downstream applications.
500001	CPO2 cryoPREP Automated Pulverizer	Automated tissue disruption tool to process fresh frozen tissues (FFT) with masses in the range of 15 mg to 2 g for applications, such as tissue ChIP-Seq and ChIP-qPCR.
500230	CPO1 cryoPREP Manual Pulverizer	Manual tissue disruption tool to process fresh frozen tissue (FFT) with masses in the range of 15 mg to 1 g for applications, such as tissue ChIP-Seq and ChIP-qPCR.

Selected epigenomic-focused publications citing Covaris

Covaris truChIP Publications

- Tharp KM, Kang MS, Timblin GA, et al. Actomyosin-Mediated Tension Orchestrates Uncoupled Respiration in Adipose Tissues. *Cell Metab.* 2018;27(3):602-615.e4. DOI: [10.1016/j.cmet.2018.02.005](https://doi.org/10.1016/j.cmet.2018.02.005)
- Manni M, Gupta S, Ricker E, et al. Regulation of age-associated B cells by IRF5 in systemic autoimmunity. *Nat Immunol.* 2018;19(4):407-419. DOI: [10.1038/s41590-018-0056-8](https://doi.org/10.1038/s41590-018-0056-8)
- Yao H, Hill SF, Skidmore JM, et al. CHD7 represses the retinoic acid synthesis enzyme ALDH1A3 during inner ear development. *JCI Insight.* 2018;3(4). DOI: [10.1172/jci.insight.97440](https://doi.org/10.1172/jci.insight.97440)

Covaris truChIP Tissue Publications

- Michaelson J, Shin M, Koh J, et al. Neuronal PAS Domain Proteins 1 and 3 Are Master Regulators of Neuropsychiatric Risk Genes. *Biological Psychiatry.* 2017;82(3):213-223. DOI: [10.1016/j.biopsych.2017.03.021](https://doi.org/10.1016/j.biopsych.2017.03.021)
- Pomerantz MM, Li F, Takeda D, et al. The androgen receptor cistrome is extensively reprogrammed in human prostate tumorigenesis. *Nature genetics.* 2015;47(11):1346-1351. DOI: [10.1038/ng.3419](https://doi.org/10.1038/ng.3419)

DNA Methylation Publications

- Donnard E, Vangala P, Afik S, et al. Comparative Analysis of Immune Cells Reveals a Conserved Regulatory Lexicon. *Cell Syst.* 2018;6(3):381-394.e7. DOI: [10.1016/j.cels.2018.01.002](https://doi.org/10.1016/j.cels.2018.01.002)
- Reizel Y, Sabag O, Skversky Y, et al. Postnatal DNA demethylation and its role in tissue maturation. *Nat Commun.* 2018;9(1):2040. DOI: [10.1038/s41467-018-04456-6](https://doi.org/10.1038/s41467-018-04456-6)
- Donaghey J, Thakurela S, Charlton J, et al. Genetic determinants and epigenetic effects of pioneer-factor occupancy. *Nat Genet.* 2018;50(2):250-258. DOI: [10.1038/s41588-017-0034-3](https://doi.org/10.1038/s41588-017-0034-3)