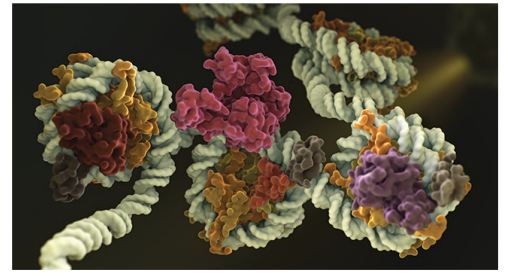


CELL SIGNALING TECHNOLOGY

Introducing the New SimpleChIP® Plus Sonication Chromatin IP Kit #56383



Everything you need to confidently perform successful sonication-based ChIP experiments

Flexible

Perform ChIP reactions compatible with downstream processing by either PCR or next-gen sequencing for histones, transcription factors, or co-factors.

High-performance

Specially formulated cell and nuclear lysis buffers protect chromatin integrity and antibody epitopes, resulting in increased immuno-enrichment.

Complete

Contains buffers for preparing chromatin from cells or tissues, DNA purification columns, positive and negative control antibodies, and positive control primers.

Straightforward

Simple to follow protocol provides scientists of all experience levels with the support needed to perform successful ChIP experiments.

Adjustable

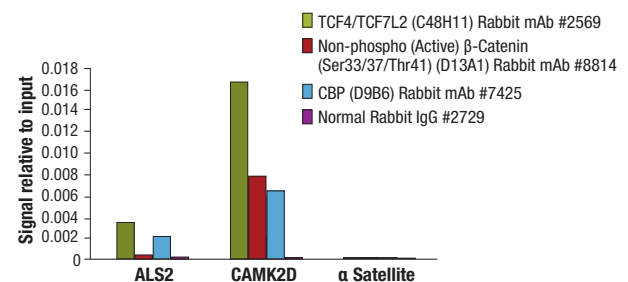
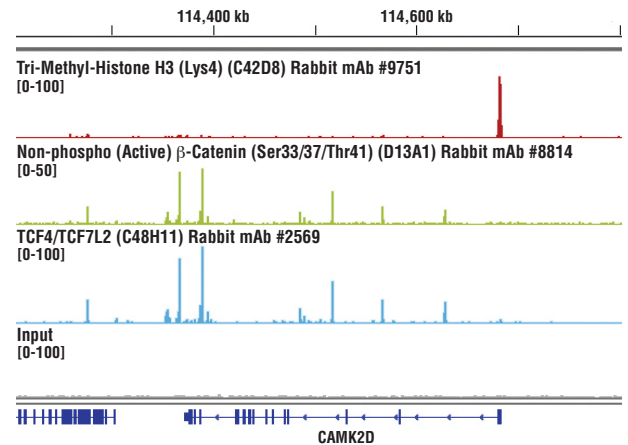
Multiple stopping points indicated within the protocol allow ChIP experiments to be integrated into daily workflow.

Our new sonication kit supports using ChIP-qPCR or ChIP-seq to assess histones, transcription factors, or cofactors in tissues or cells.

ChIP-seq and ChIP-qPCR data shows binding across CAMK2D, a known target gene of H3K4me3, TCF4/TCF7L2, and β -Catenin in HCT 116 cells.

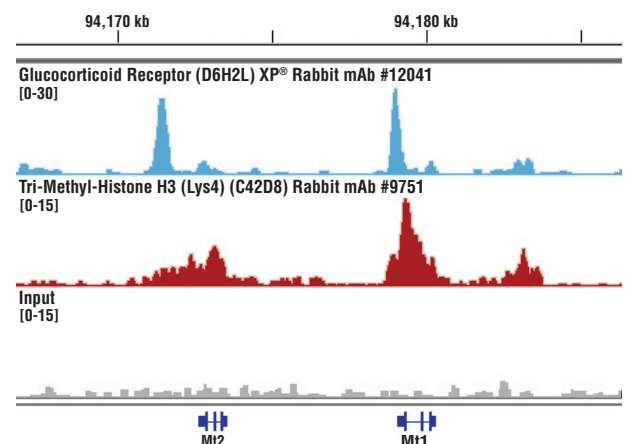
ChIP was performed with cross-linked chromatin from 4×10^6 HCT 116 cells and the indicated antibodies using SimpleChIP® Plus Sonication Chromatin IP Kit #56383. DNA Libraries were prepared from 50 ng enriched H3K4me3 ChIP DNA or 5 ng enriched TCF4/TCF7L2 and β -Catenin ChIP DNA using NEBNext® Ultra™ II DNA Library Prep Kit for Illumina®, and sequenced on the Illumina NextSeq.

ChIP was performed with cross-linked chromatin from 4×10^6 HCT 116 cells and the indicated antibodies using the SimpleChIP® Plus Sonication Chromatin IP Kit #56383. The enriched DNA was quantified by real-time PCR using human ALS2 exon 1 primers, SimpleChIP® Human CaMK2D Intron 3 Primers #5111, and SimpleChIP® Human α Satellite Repeat Primers #4486. The amount of immunoprecipitated DNA in each sample is represented as signal relative to the total amount of input chromatin, which is equivalent to one.



ChIP-seq data shows binding across Mt2, a known target gene of both GR and H3K4me3 in mouse liver.

Mouse liver was cross-linked for 10 min and disaggregated into a single-cell suspension using a Dounce homogenizer. ChIP was performed with sonicated chromatin and ant the indicated antibodies using SimpleChIP® Plus Sonication Chromatin IP Kit #56383. DNA Libraries were prepared from 5ng enriched GR ChIP DNA or 50 ng enriched H3K4me3 ChIP DNA using NEBNext® Ultra™ II DNA Library Prep Kit for Illumina® and sequenced on the Illumina NextSeq.



Learn more at:

www.cellsignal.com/ChIP

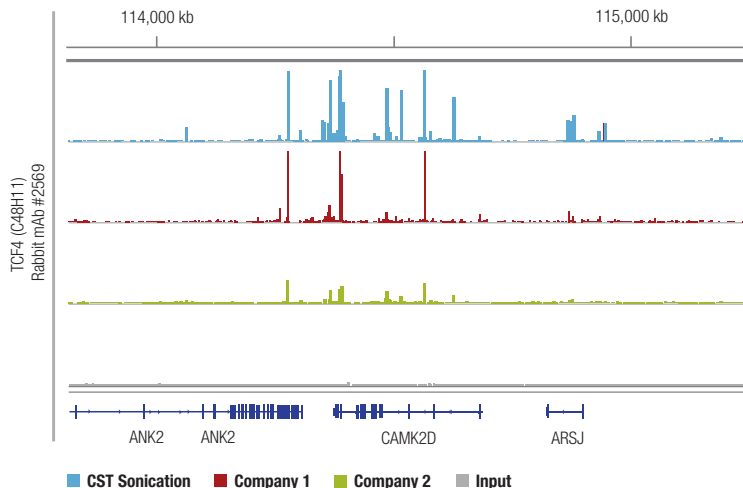


Cell Signaling
TECHNOLOGY®

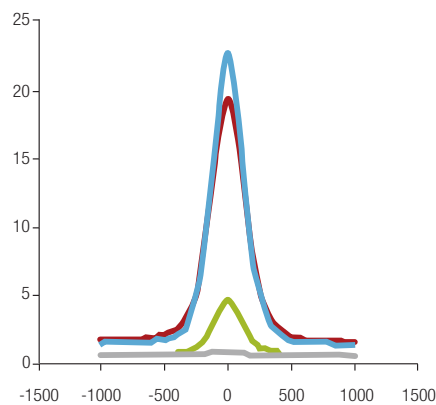
SimpleChIP® Plus Sonication Chromatin IP Kit #56383

Compared to other company kits, the CST Sonication Kit provides the strongest S/N ratio.

Local Gene Analysis (Localized S/N)



Meta Gene Analysis (Whole Genome S/N)



Chromatin was prepared using cross-linked chromatin from 4×10^6 HCT116 cells according to the protocols provided by the kit manufacturers, and immuno-enriched using the indicated antibodies. The ChIP-seq tracks on the left show enrichment of the protein of interest across a localized region of interest. The meta gene analysis on the right depicts the signal-to-noise ratio of all identified peaks found across the whole genome. Input sample was used as a negative control for both ChIP-seq track view and meta gene analysis.

Whatever your preferred method of chromatin preparation, we have a ChIP kit to suit your experimental needs.

SimpleChIP Kits

SimpleChIP® Plus Sonication Chromatin IP Kit (Magnetic Beads) #56383

SimpleChIP® Plus Enzymatic Chromatin IP Kit (Magnetic Beads) #9005

SimpleChIP® Enzymatic Chromatin IP Kit (Magnetic Beads) #9003

SimpleChIP® Plus Enzymatic Chromatin IP Kit (Agarose Beads) #9004

SimpleChIP® Enzymatic Chromatin IP Kit (Agarose Beads) #9002

Don't worry if you run out of a buffer. We also offer them individually.

Buffers

SimpleChIP® Sonication Cell and Nuclear Lysis Buffers #81804

SimpleChIP® Enzymatic Cell Lysis Buffers A & B #14282

SimpleChIP® Chromatin IP Buffers #14231

SimpleChIP® DNA Purification Buffers and Spin Columns #14209

YOUR CST ACCOUNT REPRESENTATIVE:

Learn more at:

www.cellsignaling.com/ChIP

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