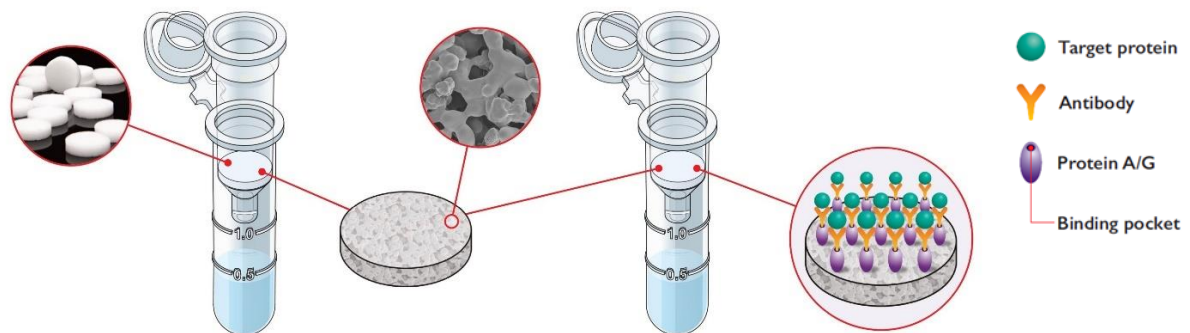


Brochure 2022

Solid-State Chromatin Immunoprecipitation

Chromatin immunoprecipitation (ChIP) with the patented bead-free technology from Chromatrap® provided from Porvair Sciences utilizes filters with an inert porous polymer matrix coupled with Protein-A or Protein-G on the surface. This increased surface area maximizes immunocapture of antibody-chromatin complexes from your samples.



Features:

- Easy to use and simple spin column protocol with less manual handling
- Highest sensitivity and binding capacity through optimally oriented Protein-A/G arrangement across filter (see Figure)
- No sample loss as antibody-chromatin complexes are captured and retained on filter
- Lowest background and exceptional signal-to-noise ratio compared to other ChIP kits
- Lowest amount input material, highest DNA yield
- ChIP from as low as 1000 cells, 50 ng chromatin or 5 mg tissue
- Available as Protein-A/G spin columns or 96 well filter plates
- Chromatin-to-Sequencing ready in under 5 hours
- **Applications:** Next Generation Sequencing, PCR, RT-PCR, Mass Spectrometry

ChIP-Seq Kits

- ❖ Most sensitive kit at low cell numbers
- ❖ Can be used with:
 - Cell lines, primary cells, and difficult cell types and tissues
 - Low abundant targets
 - Library preparation kits
 - All sequencing platforms (e.g. Inc Illumina, Ion torrent, Roche)



Cat.No.	Description	Case
500189	ChIP-seq 24 spin columns, Pro-A, with premium control antibodies	24
500190	ChIP-seq 24 spin columns, Pro-G, with premium control antibodies	24
500191	ChIP-seq Enzymatic 24 spin columns, Pro-A, with premium control antibodies	24
500192	ChIP-seq Enzymatic 24 spin columns, Pro-G, with premium control antibodies	24

UniqSeq Kits

- ❖ Complete solution for ChIP and library preparation for next generation sequencing
- ❖ Compatible with all Illumina sequencers
- ❖ Low levels of duplication (< 2 %)
- ❖ High (98 %) uniquely mapped reads
- ❖ One tube reaction – End repair, A-tail & ligation in one step
- ❖ Bead free size selection
- ❖ Low input (500 pg DNA)

Cat.No.	Description	Case
500264	Chromatrap UniqSeq Pro-A (ChIP seq Pro-A including library preparation reagents) sonication	24
500265	Chromatrap UniqSeq Pro-G (ChIP seq Pro-G including library preparation reagents) sonication	24
500266	Chromatrap UniqSeq Pro-A (ChIP seq Pro-A including library preparation reagents) enzymatic	24
500267	Chromatrap UniqSeq Pro-G (ChIP seq Pro-G including library preparation reagents) enzymatic	24

ChIP-Seq HT 96-well Plates

- ❖ Perform up to 96 reactions simultaneously in 1 day
- ❖ Pair with automated liquid handling for even higher throughput
- ❖ Can be used for:
 - Antibody validation
 - Multiple antibodies
 - Multiple samples
 - Multiple cell types
 - Multiple drug compounds/inhibitors



Cat.No.	Description	Case
500214	ChIP-seq 96 well plate kit Pro-A, with premium control antibodies	1 x 96
500215	ChIP-seq 96 well plate kit Pro-G, with premium control antibodies	1 x 96
500216	ChIP-seq Enzymatic 96 well plate kit Pro-A, with premium control antibodies	1 x 96
500217	ChIP-seq Enzymatic 96 well plate kit Pro-G, with premium control antibodies	1 x 96

Specialised ChIP Kits – Native

- ❖ Only commercial method to study chromatin in its 'native' state
- ❖ No chemical fixation required
- ❖ Cells are in more natural 'native' state
- ❖ Can be used for:
 - Non-fixed samples
 - Histone modifications
 - Transcription factors tightly associated with DNA

Cat.No.	Description	Case
500237	qPCR & Sequencing Chromatrap Native Pro-A ChIP kit for enzymatic shearing only	24
500238	qPCR & Sequencing Chromatrap Native Pro-G ChIP kit for enzymatic shearing only	24

Specialised ChIP Kits – FFPE

- ❖ For use with formalin fixed paraffin embedded (FFPE) tissue
- ❖ Can be used for:
 - Tissue samples
 - Biopsies
 - Difficult-to-lyse samples
 - Range of different FFPE tissue (human & animal)

Cat.No.	Description	Case
500235	FFPE Chromatrap Pro-A spin column kit, 24 columns (includes control antibodies and enzymes)	24
500236	FFPE Chromatrap Pro-G spin column kit, 24 columns (includes control antibodies and enzymes)	24

Specialised ChIP Kits – Drosophila

- ❖ Only commercial method to study *Drosophila* (fruit fly) chromatin
- ❖ Focus on *Drosophila* community of researchers and neuroscientists
- ❖ Uses as little as 5 flies or 500 ng chromatin
- ❖ Can be used for:
 - Whole body samples
 - Larvae samples
 - Pupal samples
 - Embryonic samples
 - Histone modifications
 - Transcription factors



Drosophila melanogaster
(fruit fly)

Cat.No.	Description	Case
500274	qPCR & Sequencing Chromatrap ChIP kit from Drosophila insects Pro-A ChIP kit for sonication shearing only	24
500275	qPCR & Sequencing Chromatrap ChIP kit from Drosophila insects Pro-G ChIP kit for sonication shearing only	24

Shearing Kits

- ❖ For optimisation of shearing conditions

→ Sonication

- ❖ Simple and effective method for preparation of high-quality chromatin
- ❖ Can be used for most cell types and tissues
- ❖ Useful for difficult to lyse samples



Cat.No.	Description
500239	Sonication Shearing Buffers Kit

→ Enzymatic

- ❖ Suitable for native chromatin preparation
- ❖ Effective alternative to sonication as no expensive equipment is required
- ❖ Milder treatment, can be less disruptive to the epitopes



Cat.No.	Description
500165	Enzymatic Shearing Buffers kit

Antibodies and Primers for ChIP assays

- ❖ Use of high-quality, specific ChIP validated antibody is essential for the success of a ChIP assay
- ❖ Positive and negative control targets
- ❖ Can be supplied with primer sets for extra validation
- ❖ Reduce time spent searching databases and designing primers
- ❖ Confidence in correct targets for antibodies



Cat.No.	Description
700003	H3K9me3 ChIP validated antibody
700010	H3K4me3 ChIP validated antibody
700011	H3K27ac ChIP validated antibody
700012	H3K14ac ChIP validated antibody
700013	H3K27me3 ChIP validated antibody
700016	H3K4me1 ChIP validated antibody
700018	H4K12ac ChIP validated antibody
700022	H3K9me1 ChIP validated antibody
700023	H3K9me2 ChIP validated antibody
700024	H3K9ac ChIP validated antibody
900001	ChIP validated H3K27me3 antibody with Positive and Negative Primer Sets
900002	ChIP validated H3K4me3 antibody with Positive and Negative Primer Sets
900005	ChIP validated H3K9me3 antibody with Positive and Negative Primer Sets
900008	ChIP validated H3K14ac antibody with Positive and Negative Primer Sets
900009	ChIP validated H3K27ac antibody with Positive and Negative Primer Sets
900012	ChIP validated H3K27me3 antibody with Positive Primer Set
900014	ChIP validated H3K4me3 antibody with Positive Primer Set
900017	ChIP validated H3K9me3 antibody with Positive Primer Set
900021	ChIP validated H3K27ac antibody with Positive Primer Set
900023	ChIP validated H3K4me1 antibody with Positive and Negative Primer Sets
900025	ChIP validated H4K12ac antibody with Positive and Negative Primer Sets
900026	ChIP validated H3K9me1 antibody with Positive and Negative Primer Sets
900027	ChIP validated H3K9me2 antibody with Positive and Negative Primer Sets
900028	ChIP validated H3K4me1 antibody with Positive Primer Set
900030	ChIP validated H4K12ac antibody with Positive Primer Set
900031	ChIP validated H3K9me1 antibody with Positive Primer Set
900032	ChIP validated H3K9me2 antibody with Positive Primer Set
900036	ChIP validated H3K4me3 antibody with Drosophila Positive Primer Set

gDNA Removal prior to RNA Extraction

The new Chromatrap® genomic DNA (gDNA) Removal Columns can be used to eliminate gDNA along with RNA extraction recommended with Chromatrap® RNA Extraction kit. This procedure ensures maximum purity and yield of pure RNA from a wide range of samples in a fast and cost-effective way.

Features of Chromatrap® gDNA Removal Columns:

- Enzyme-free gDNA removal from cell lysates within 30 seconds / sample
- Load and spin method for gDNA-free, total RNA
- Simple, one-step centrifugation method
- Highly specific gDNA removal with no loss of precious RNA
- Ideal for DNA-sensitive applications
- Can be used as an upstream gDNA removal kit prior to RNA extraction



Features of Chromatrap® RNA Extraction kit:

- Reproducible and fast extraction of high-quality total RNA
- Compatible with a wide range of samples including buffy coat, buccal swabs, and gram-negative bacteria
- Process up to 10^7 cultured animal cells, 50 mg animal tissue, 0.5 ml blood, 250 mg plant material, 5×10^7 yeasts or 5×10^8 bacteria
- High yield extraction of up to 1000 µg pure RNA
- Application-ready total RNA for qPCR, Microarray or other in vitro applications



Cat. No.	Description	Case
500338	Chromatrap® gDNA Removal Columns	50
500335-050	Chromatrap® RNA Extraction Column kit	50

Also available in the Chromatrap® Product Range:

Chromatrap® DNA Extraction

- ❖ Used to extract DNA from cells, tissues and blood samples
- ❖ Allows highest amount of DNA recovery from starting sample (DNA recovery up to 98 %)
- ❖ Purification of up to 50 µg DNA
- ❖ Samples are free from contaminants such as salts, inhibitors or enzymes
- ❖ For applications such as PCR, CHIP, Southern blotting, DNA methylation studies, Molecular cloning and Sequencing
- ❖ Phenol- and chloroform-free



Cat.No.	Description	Case
500218	Chromatrap® DNA Purification (columns)	50

Chromatrap® Homogeniser Spin Columns

- ❖ Quickly and efficiently homogenise cells and tissues lysates in a single step. Contained within a spin column, the unique proprietary bio-shredding Vyon® polymer reduces lysate viscosity and captures insoluble debris by centrifugation
- ❖ Perfect alternative to syringe & needle homogenisation
- ❖ Quick, clean and efficient homogenisation
- ❖ Reduces viscosity of lysate
- ❖ Ideal sample preparation for nucleic acid miniprep and midiprep
- ❖ Manufactured from PP, stable until -80 °C
- ❖ Centrifuge at max. 25,000 x g with fixed angled rotors and 30,000 x g with swing-out rotors
- ❖ Maximal sample volume of 700 µl
- ❖ No cross-contamination possible



Cat. No.	Description	Case
500289	Chromatrap® Homogeniser Spin Columns	50