



Innovating Epigenetics Solutions

CHROMATIN IMMUNOPRECIPITATION

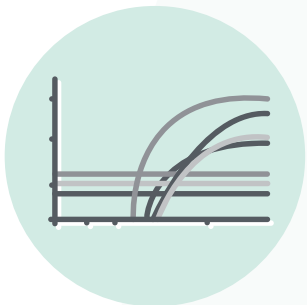
VALIDATED IN:

- Low input ChIP kits
- ChIP kits for transcription factors and histones
- Plant ChIP kits
- ChIP-qPCR and ChIP-seq kits
- Chromatin shearing and crosslinking
- ChIP-grade antibodies

Diagenode helps you master ChIP and ChIP-seq

Chromatin immunoprecipitation (ChIP) is a method used to determine the location of DNA binding sites on the genome for a specific protein of interest, giving invaluable insights into the regulation of gene expression. ChIP involves the selective enrichment of a chromatin fraction containing a specific antigen. Antibodies that recognize a specific protein or protein modification are used to determine the relative abundance of that antigen at a specific locus or loci.

ChIP can be used to compare enrichment of proteins, map protein modifications, or quantify a protein modification during a time course. ChIP is frequently used in studies that focus on cellular differentiation, tumor suppressor gene silencing, the effect of histone modifications on gene expression, and other studies involving transcriptional activation and repression. Diagenode offers complete, validated solutions for your ChIP-qPCR and ChIP-seq assays.



ChIP with qPCR or microarray analysis

ChIP coupled with qPCR can be used to study protein-DNA interactions at known genomic binding sites. ChIP-qPCR is advantageous for studies that focus on specific genes and regulatory regions across differing experimental conditions. ChIP combined with microarrays is a common technique for measuring a larger number of binding sites.

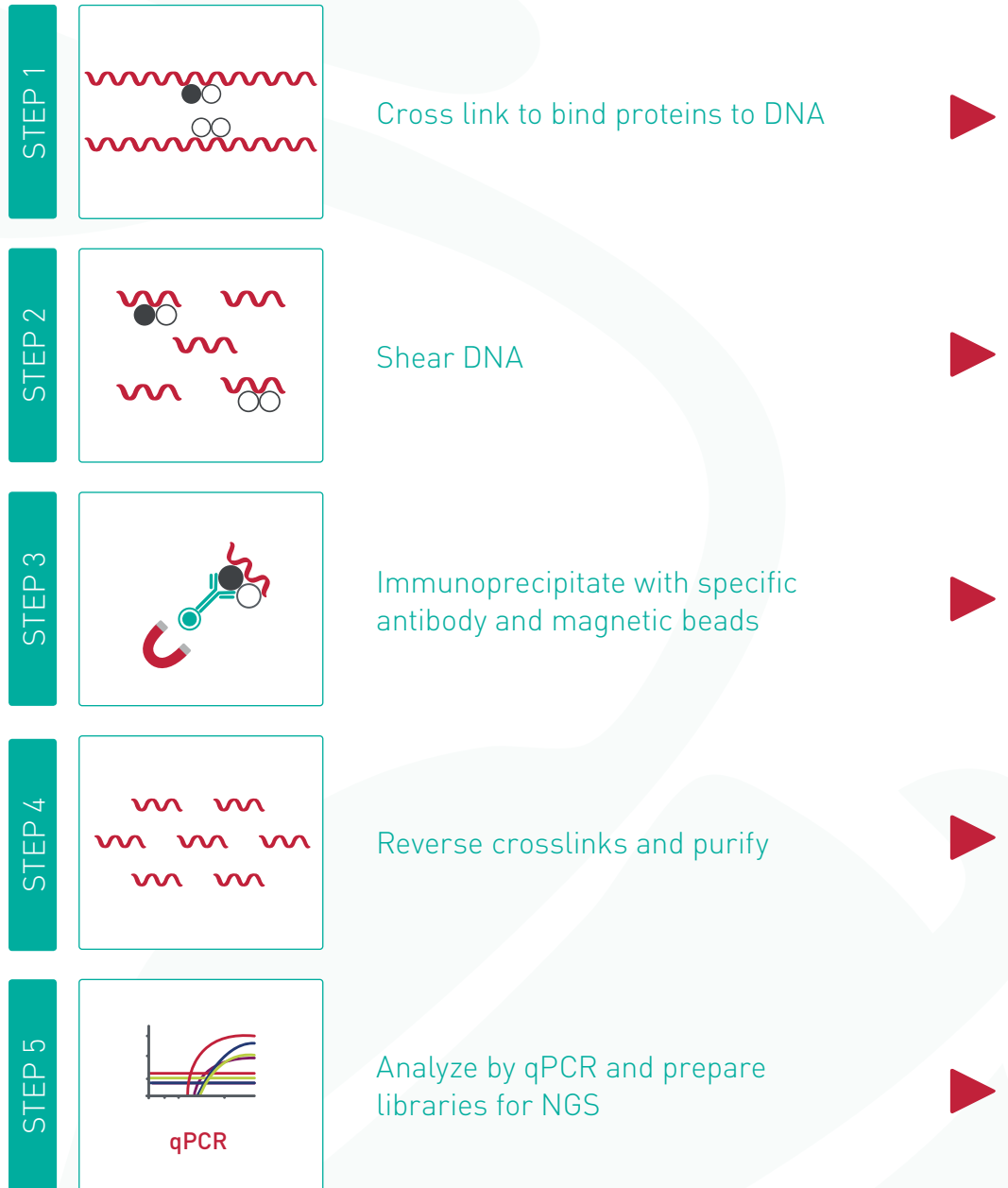


ChIP-seq

ChIP-seq combines ChIP with massively parallel DNA sequencing to identify and precisely map protein-DNA binding sites at a genome-wide level.

ChIP is at your fingertips

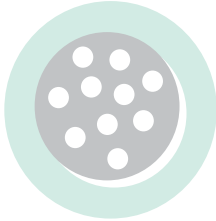
Step by step ChIP workflow



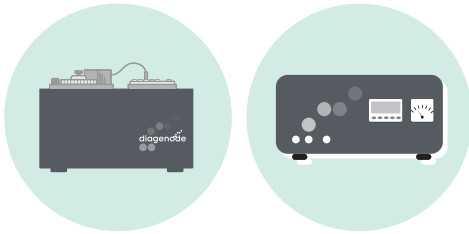
LEGEND

- Protein of interest
- Other protein
- ~ DNA
- Y Antibody
- Magnetic bead
- U Magnet

Optimal solutions from Diagenode



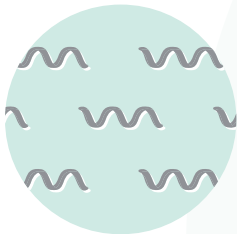
- ChIP Cross-link Gold



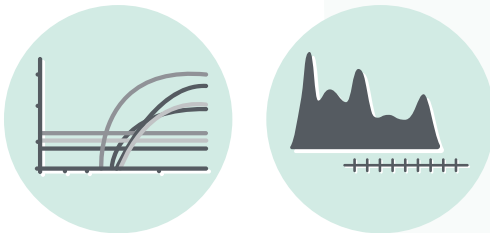
- **Bioruptor® Pico** and **Bioruptor® Plus**
- Chromatin shearing optimization kits



- **ChIP kits** for transcription factors, histones, low inputs, plants
- **ChIP and ChIP-seq grade antibodies**



- Diagenode's ChIP kits contain **iPure** module for optimal purification



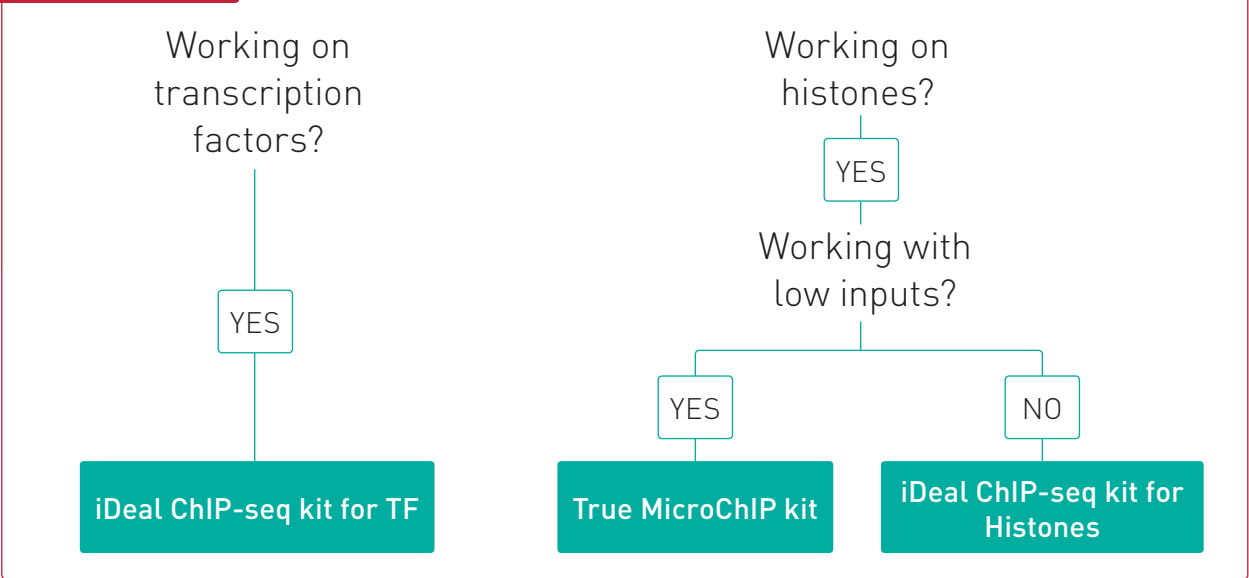
- **ChIP-qPCR**: Diagenode's primer pairs
- **ChIP-seq**: MicroPlex Library Preparation kit and iDeal Library Preparation kit



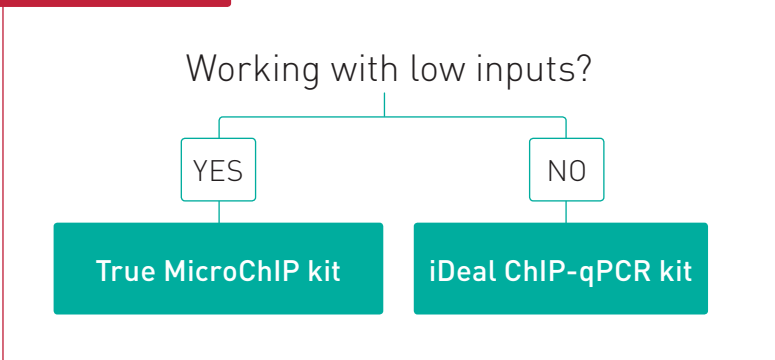
IP-Star® Compact – automation of your ChIP experiments

Which ChIP kit is right?

ChIP-seq



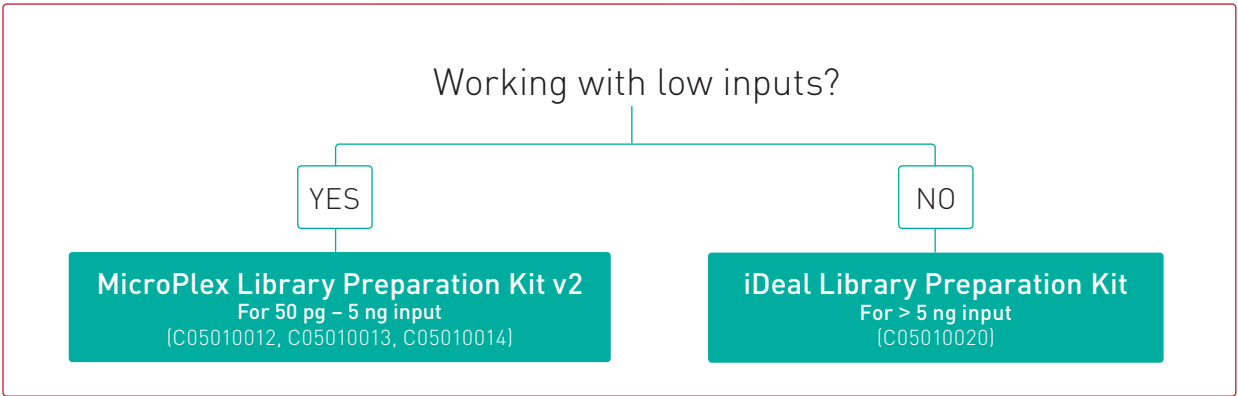
ChIP-qPCR



Plant ChIP



Which library preparation kit is right?





A quick glance: ChIP kit features

		KIT				
		iDeal ChIP-qPCR	iDeal ChIP-seq for Histones	iDeal ChIP-seq for TF	True MicroChIP	Universal Plant ChIP-seq
FEATURES	Starting material: cells/IP	H: 100 K - 1 M TF: 4 M	100 K - 1 M	4 M	10 K - 100 K	180 K - 1.5 M
	Starting material: tissues/IP	H: 1.5 - 5 mg TF: 30 mg	1.5 - 5 mg	30 mg		0.1 - 2 g fresh weight
	Target: histones	✓	✓		✓	✓
	Target: TF	✓		✓		✓
	ChIP-qPCR suitable	✓	✓	✓	✓	✓
	ChIP-seq suitable		✓	✓	✓	✓
	1.5 hour handling time with 2 day turnaround	✓	✓	✓	✓	✓
	Automated version available	✓	✓	✓	✓	✓
	Control antibodies		IgG and H3K4me3	IgG and CTCF	IgG and H3K4me3	IgG and H3K4me3
	Control PCR primers		GAPDH TSS and Myoglobin exon 2	H19 and Myoglobin exon 2	GAPDH TSS and Myoglobin exon 2	Arabidopsis FLC - ATG and - Intron1
Included buffers and reagents	<ul style="list-style-type: none"> • Cell lysis • Chromatin shearing • IP • DNA isolation 	<ul style="list-style-type: none"> • Cell lysis • Chromatin shearing • IP • DNA purification 	<ul style="list-style-type: none"> • Cell lysis • Chromatin shearing • IP • DNA purification 	<ul style="list-style-type: none"> • Cell lysis • Chromatin shearing • IP • Elution 	<ul style="list-style-type: none"> • Cell lysis • Chromatin shearing • IP • DNA purification 	
ORDERING	Manual kits	C01010180 (24 rxn)	C01010050 (10 rxn) C01010051 (24 rxn) C01010059 (100 rxn)	C01010054 (10 rxn) C01010055 (24 rxn) C01010170 (100 rxn)	C01010130 (16 rxn)	C01010152 (24 rxn)
	Kits for IP-Star®	C01010181 (24 rxn)	C01010057 (24 rxn) C01010171 (100 rxn)	C01010058 (24 rxn) C01010172 (100 rxn)	C01010140 (16 rxn)	C01010152 (24 rxn)

Customize your ChIP kit the way YOU want it!

At Diagenode, we understand – you don't always use every component from reagent kits. Now, with Diagenode's ChIP Kit Customizer, buy only the reagents that you actually need. You can still enjoy the benefits of Diagenode's carefully optimized, well-cited ChIP reagents – from fixation reagents, perfected buffers and antibodies, library preparation reagents and more – without purchasing a complete kit. The ChIP Kit Customizer delivers the flexibility you want with the validated and high-quality ChIP reagents you need. Log into our web site to customize your kit.

Shop online in our EpiStore at
www.diagenode.com