

Chromatin Assembly Kit

generate high-quality chromatin for downstream success

Active Motif's Chromatin Assembly Kit enables you to generate chromatin *in vitro* from linear or supercoiled DNA. Based on an ATP-dependent method, the kit utilizes purified recombinant human chromatin assembly complex ACF and histone chaperone NAP-1 (h-NAP-1) with purified HeLa core histones for *in vitro* assembly of extended, regularly ordered, periodic arrays of nucleosomes. This simple and easy-to-follow protocol generates assembled chromatin in hours with few manipulations, providing you with assembled chromatin that is ideal for downstream applications such as *in vitro* ChIP, transcription and HAT assays. The Chromatin Assembly Kit also includes reagents to confirm the ordered array of nucleosomes on the DNA with a simple and quick partial enzymatic digestion. The partial digestion clearly shows the ordered spacing of nucleosomes on the DNA (Figure 1). For additional information please give us a call or visit www.activemotif.com.

Chromatin Assembly Kit advantages

- Generate chromatin from linear or supercoiled DNA
- ATP-dependent method results in an extended array of regularly spaced nucleosomes
- Positive control supercoiled DNA provided to ensure success
- Easy protocol, simply add components and incubate
- Excellent substrate for gene regulation experiments

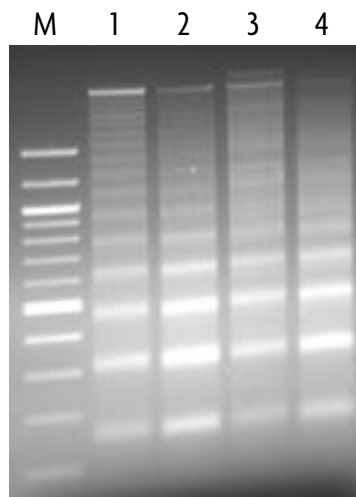


Figure 1: Enzymatic digestion of assembled chromatin.

Chromatin assembled from 1 µg samples of circular DNA (Lanes 1 & 2) and linear DNA (Lanes 3 & 4) were digested for 2 and 4 minutes, respectively, deproteinated, phenol/chloroform extracted and run on an agarose gel. Each sample type processed with the Chromatin Assembly Kit resulted in regularly spaced nucleosomes.

CONTENTS & STORAGE

Recombinant hNAP-1 protein, purified HeLa core histones, recombinant ACF complex, high and low salt buffers, 10X ATP regeneration system, Creatine Kinase, control supercoiled DNA, Enzymatic Shearing Cocktail, Proteinase K and Enzymatic Stop solution, glycogen, 5X Orange G Dye, and siliconized microcentrifuge tubes. Storage conditions range from room temperature to -80°C, see the manual for specific details. Contents are guaranteed for six months from delivery when stored properly.

Product	Format	Catalog No.
Chromatin Assembly Kit	10 rxns	53500