

Certificate of Analysis

Magna ChIP™ A or EZ-Magna ChIP™ A Chromatin Immunoprecipitation Kits

Catalog # 17-610 or 17-408

MAGNA0001 Lot#DAM1421807

MAGNA0003 (Any Lot), MAGNA0004 (Any Lot)

Magna ChIP™ A & EZ-Magna ChIP™ A Kit Configurations	
Magna ChIP™ A (Cat. # 17-610)	EZ-Magna ChIP™ A (Cat. # 17-408)
MAGNA0001 (Store at 4°C)	MAGNA0001 (Store at 4°C)
MAGNA0003 (Store at -20°C)	MAGNA0004 (Store at -20°C)

Kit Components

MAGNA0001 Contents (17-610 or 17-408)		
Store at 4°C		
Component	Catalogue #	Quantity
Magnetic Protein A beads	CS200637	450 µl
ChIP Dilution Buffer	CS200624	12.5 ml
Low Salt Wash Buffer	CS200625	12.5 ml
High Salt Wash Buffer	CS200626	12.5 ml
LiCl Wash Buffer	CS200627	12.5 ml
TE Buffer	CS200628	12.5 ml
Cell Lysis Buffer	CS200634	5 ml
Nuclear Lysis Buffer	CS200623	5 ml
ChIP Elution buffer (w/o Proteinase K)	CS200629	5 ml
10X Glycine	20-282	11 ml
10X PBS	20-281	24 ml
Store the Following at Room Temperature Upon Receipt		
Spin Filters	20-290	22 Filters
Collection Tubes	20-291	22 Tubes
Bind Reagent A	20-292	25 ml
Wash Reagent B	20-293	12.5 ml
Elution Reagent C	20-294	1.5 ml
MAGNA0003 Contents (17-610)		
Store at -20°C		
Protease Inhibitor Cocktail II, 200X	20-283	110 µl **Contains DMSO
Proteinase K	20-298	600 µg in 60 µl
MAGNA0004 Contents (17-408)		
Store at -20°C		
Protease Inhibitor Cocktail II, 200X	20-283	110 µl **Contains DMSO
Proteinase K	20-298	600 µg in 60 µl
Control Primers	22-004	75µl
Rabbit Anti-Acetyl Histone H3	06-599B	125 µg in 125 µl
Rabbit Normal IgG	PP64B	125 µg in 125 µl

**FOR RESEARCH USE ONLY
DO NOT USE IN HUMANS**

Product Description: The Magna ChIP™ kits contain reagents optimized for immunoprecipitation of chromatin from mammalian cells. The EZ-Magna ChIP™ kits contain all elements of the Magna ChIP™ kits, but also include IP and PCR controls to ensure successful optimization of the assay.

For all Magna ChIP™ kits, detection of the DNA region, gene or promoter of interest in immunoprecipitated chromatin must be empirically determined by the researcher. PCR using promoter-specific primers is recommended for detection and analysis of enriched DNA.

For **EZ-Magna ChIP™ A** (Cat.# 17-408), the positive control antibody is a rabbit polyclonal antibody that detects acetyl Histone H3 of human, mouse and tetrahymena (other species not tested). The negative control is Normal Rabbit IgG which controls for the non-specific immunoselection of chromatin by immunoglobulins.

The Control Primer mix is included for detection of a 166 base pair region of the human GAPDH promoter by both end-point and real-time quantitative PCR. Use of these primers with DNA from species other than human is not recommended.

Quantity: Two boxes containing all necessary reagents to perform 22 chromatin immunoprecipitation (ChIP) assays.

Storage and Stability: Upon receipt, store components at the temperatures indicated on the labels. Kit components are stable for 1 year from date of shipment when stored as directed.

Quality Control & Application Testing

End Point and qPCR Analysis of Chromatin

Immunoprecipitation:

Chromatin immunoprecipitation was performed using chromatin from HeLa cells and either anti-acetyl Histone H3 (Cat.# 06-599B) or Normal Rabbit IgG (Cat.# PP64B) as the immunoprecipitating antibody. Purified DNA was then analyzed by end point PCR (Fig. 1, representative lot) or qPCR (Fig. 2, current lot) using Control Primers specific for the GAPDH promoter. Fold Enrichment reflects the ratio of Acetyl H3 signal to that of IgG signals derived from a standard curve of Input DNA in qPCR.

Fig. 1

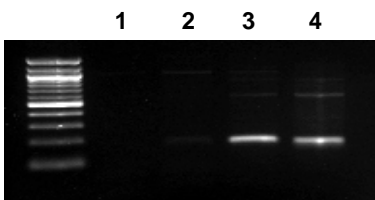
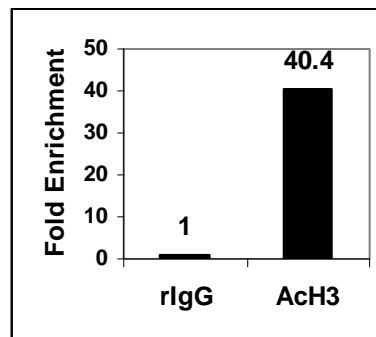


Fig.1 Samples:

- Lane 1: No template control
- Lane 2: Rabbit IgG IP
- Lane 3: Anti-Acetyl H3 IP
- Lane 4: 2% chromatin Input

Fig. 2



General References:

1. Das, Partha M, *et al* (2004). Chromatin immunoprecipitation assay. *BioTechniques* **37**: 961-9.
2. Luo, R X, *et al* (1998). Rb interacts with histone deacetylase to repress transcription. *Cell* **92**: 463-73.
3. Braunstein, M, *et al* (1996). Efficient transcriptional silencing in *Saccharomyces cerevisiae* requires a heterochromatin histone acetylation pattern. *Mol Cell Biol* **16**: 4349-56.
4. Buck, Michael J and Lieb, Jason D (2004). ChIP-chip: considerations for the design, analysis, and application of genome-wide chromatin immunoprecipitation experiments. *Genomics* **83**: 349-60.
5. Bernstein, Bradley E, *et al* (2004). The use of chromatin immunoprecipitation assays in genome-wide analyses of histone modifications. *Meth Enzymol* **376**: 349-60.