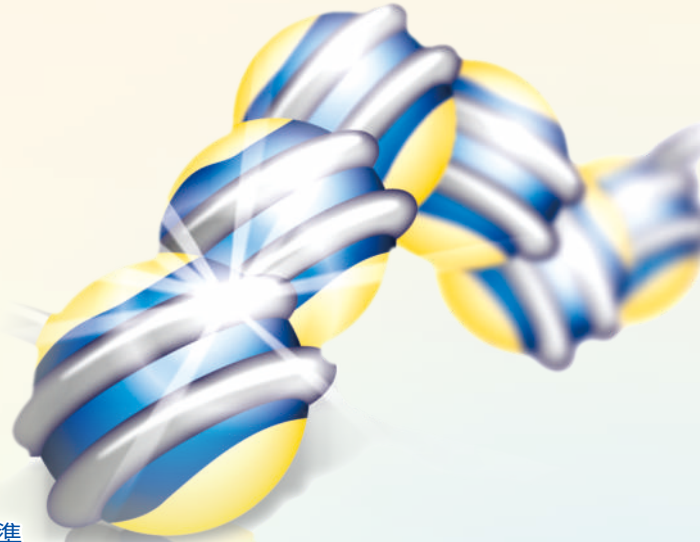


Tools for SUCCESSFUL

ChIP



染色質免疫沉澱 (Chromatin Immunoprecipitation, ChIP) 是目前用來研究自然生理狀態下，細胞內蛋白質與基因體 DNA 交互作用的主要核心技術。

要獲取成功的 ChIP 實驗結果，極為關鍵的一步就是選用能夠精準有效地抓取到目標 Chromatin 片段的抗體。為協助研究人員以更快、更好的方式達成目標，Abcam 以高於業界標準的確效流程，篩選驗證出超過 450 種 **ChIP 實驗等級抗體**；並以含有多個 IgG 結合區域的特殊嵌合蛋白 (chimeric protein)，獨家開發出更高效率的 **ChIP Kits** 產品 (見本頁下方說明)，能免除傳統耗時整晚的 Antibody-Bead 結合步驟，將 ChIP 實驗縮短至 5 小時就能完成，大幅提升 ChIP 實驗效率！

ChIP Grade Antibodies

- ✓ X-ChIP 實驗確效
- ✓ WB 或 Peptide Array 專一性測試
- ✓ 親和性管柱純化

ChIP Validation

採用 X-ChIP 實驗步驟 確認抗體效能

Anti-Histone H3 (tri methyl K4) ab8580

Abcam 採用 X-ChIP 實驗流程確認抗體效能，唯有 Enrichment 和 Background 訊號差異程度超過 10 倍的抗體產品才能通過篩選，進行後續專一性測試。

Chromatin was prepared from U2OS cells according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10 min. The ChIP was performed with 25 µg of chromatin, 2 µg of anti-Histone H3 (tri methyl K4) antibody (ab8580), and 20 µl of Protein A/G sepharose beads. No antibody was added to the beads control (yellow). The immunoprecipitated DNA was quantified by real time PCR (Taaman approach).

Specificity Testing

使用 WB 或 Peptide Array 驗證抗體專一性

Anti-Histone H3 (acetyl K27) ab4729

Abcam 使用 Peptide-inhibition Western Blot、或 Peptide Array 實驗，確認抗體不會誤認到任何非專一性目標。

All batches of anti-Histone H3 (acetyl K27) antibody (ab4729) are tested in Peptide Array against peptides to different Histone H3 modifications. Results show strong binding to Histone H3 - acetyl K27 peptide (ab24404), indicating that this antibody specifically recognises the Histone H3 - acetyl K27 modification.

Customer Feedback

產品頁面忠實呈現客戶使用心得 即使掌握產品評價

Abcam 各項產品頁面均採用公開的 Abpreview 客戶評論系統，忠實呈現使用者評分；同時附有使用者分享的實驗條件與實驗結果，讓您即時掌握產品評價與真實使用經驗！

Abpromise® Guarantee

100% 保障，確保您收到的產品品質與 Datasheet 相符

Abcam 產品 Datasheet 詳實記錄產品驗證實驗數據，並保證產品性能表現與 Datasheet 描述相符。歡迎洽詢伯森業務專員瞭解 Abpromise® Guarantee 完整保障內容。



ChIP Kits

Abcam 開發的 ChIP Kits 系列產品採用獨家創新嵌合蛋白結合技術，此種特殊嵌合蛋白帶有多個 IgG 結合區域 (IgG binding domains)，能非常有效率地抓取 ChIP 反應抗體，進而增加沈澱下來的目標 Chromatin 片段含量。

Abcam ChIP Kits 採用塗佈有特殊嵌合蛋白的 8-Strip 或磁珠進行實驗，不僅能讓研究者在 5 小時完成 ChIP 反應，取得 DNA 片段進行 PCR, Microarray, Sequencing 等下游分析實驗，同時也能讓研究者輕鬆地操作進行多個 ChIP 實驗反應！歡迎洽詢伯森業務專員索取詳細產品資訊與最新優惠訊息。

- ✓ 5小時完成ChIP反應
- ✓ Enrichment效率絕佳
- ✓ 適用PCR, Microarray, NGS等下游實驗

Product	When to Use	Sample/rxn	Steps covered	Working Time	Cat. No.
ChIP Kit - One Step	Have chromatin ready	5 µg chromatin	From chromatin shearing to recovery of DNA	5 hours	ab117138 (48 / 96 tests)
ChIP Kit Magnetic - One Step	Have chromatin ready	5 µg chromatin	From chromatin shearing to recovery of DNA	5 hours	ab156907 (48 / 96 tests)
High Sensitivity ChIP Kit	Have low input amount	2 x 10 ³ cells 0.5 mg tissue	From chromatin extraction to recovery of DNA	5 hours	ab185913 (24 / 48 tests)
ChIP-Seq High Sensitivity	Want to prepare a NGS library direct from cells	5 x 10 ⁵ cells	From chromatin extraction to recovery of DNA	7 hours	ab185908 (12 / 24 tests)
ChIP Kit - Plants	Have plant tissue samples	20 mg tissue	From chromatin extraction to recovery of DNA	6 hours	ab117137 (24 / 48 tests)

備註 (1) : 另有 ChIP Kit (ab500 / 24 tests) 內含所有 ChIP 實驗所需試劑與膠體，並隨附 Positive Control Antibody，適用於傳統標準 ChIP 實驗流程。
備註 (2) : 可搭配使用 Chromatin Extraction Kit (ab117152 / 100 tests)，僅需 1 小時即可完成 Chromatin 或 DNA-Protein Complex 萃取實驗。

ChIP Kit - One Step

ChIP: ChIP Kit - One Step ab117138

Gene	State	ab8580	Blank
RPL30	active	~0.85	~0.05
MYO-D	inactive	~0.2	~0.05
SERPINA	inactive	~0.1	~0.05

ChIP performed on HeLa cells using anti-Histone H3 (tri methyl K4) antibody (ab8580) together with ChIP Kit - One Step (ab117138). No antibody was added to the blank (yellow). The immunoprecipitated DNA was quantified by real time PCR (Taqman approach).

High-Sensitivity ChIP Kit

High Abundance Protein Enrichment ab185913

Cell Number	RNA polymerase II antibody	Non-immune IgG
0	1	1
2,000	~10	~1
4,000	~20	~1
20,000	~80	~1
100,000	~300	~1
500,000	~1,000	~1

Sheared chromatin isolated from different numbers of MBD-231 cells was used for ChIP-qPCR analysis of RNA polymerase II enrichment in GAPDH promoters using High-Sensitivity ChIP Kit (ab185913) and a quantitative PCR Fast Kit.

High-Sensitivity ChIP Kit

Low Abundance Protein Enrichment ab185913

Cell Number	ER-alpha antibody	Non-immune IgG
0	1	1
50,000	~25	~1
500,000	~75	~1

Sheared chromatin isolated from different numbers of MCF7 cells was used for ChIP-qPCR analysis of ER-alpha enrichment in TFF1 promoters using High-Sensitivity ChIP Kit (ab185913) and a quantitative PCR Fast Kit.