

# Nuclear Extraction Kit - Soluble / Insoluble Fractions ab219177

[4 References](#) [5 图像](#)

### 概述

产品名称	核Extraction试剂盒- Soluble / Insoluble Fractions
样品类型	Tissue, Adherent cells, Suspension cells
检测时间	0h 45m
产品概述	Nuclear extraction kit ab219177 offers a simple 45 minute method for extracting nuclear proteins from mammalian cells or tissues.

For optimal extraction of nuclear proteins, the kit produces three distinct extracts (fractions): soluble nuclear proteins (nuclear extract 1), nuclear proteins that remain insoluble after production of nuclear extract 1 (nuclear extract 2), and cytoplasmic proteins.

The kit contains reagents for 100 extractions, where each extraction starts with  $5 \times 10^6$  cells or 50 mg of tissue. Typical yields from each extraction are 0.3 – 0.4 mg of soluble nuclear proteins, 0.1 – 0.2 mg of insoluble nuclear proteins and 0.6 – 0.7 mg of cytoplasmic proteins. Nuclear proteins extracted with this kit can be used in a variety of applications such as western blotting and nuclear enzyme assays.

### 说明

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

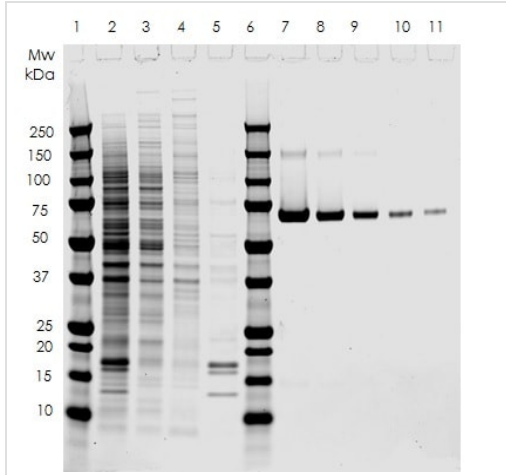
### 性能

**存放说明** Store at +4°C. Please refer to protocols.

组件	100 tests
200X DTT	1 x 1ml
Cytoplasm Extraction Buffer	1 x 55ml
Nuclear Extraction Buffer	1 x 55ml
Nuclear Lysis Buffer	1 x 55ml

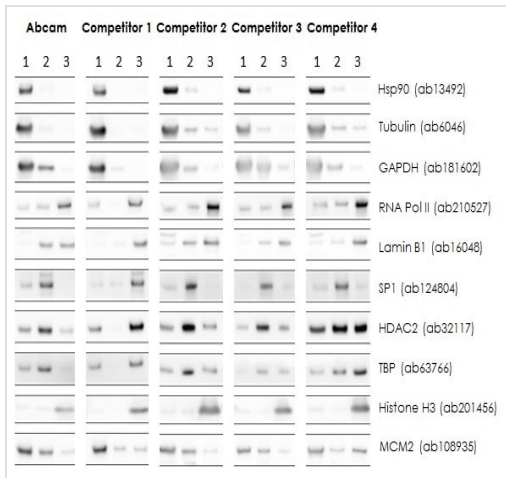
<b>组件</b>	<b>100 tests</b>
Protease Inhibitor Cocktail	1 x 1ml

**图片**



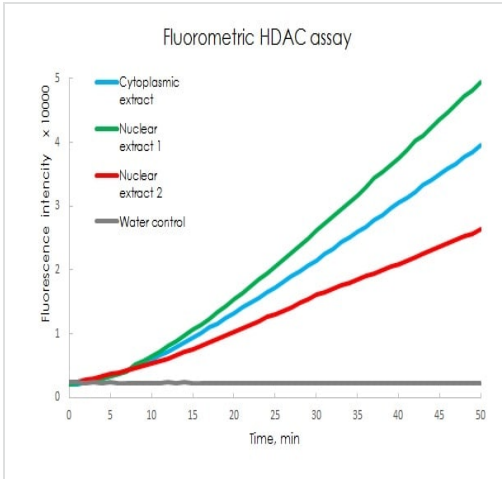
SDS PAGE analysis of HeLa cell fractionation using Nuclear Extract Kit ab219177.

Extracts were prepared from  $5 \times 10^6$  HeLa (human epithelial cell line from cervix adenocarcinoma) cells using Nuclear Extract Kit ab219177 and analysed by SDS-PAGE with Coomassie Blue staining. Extract or whole cell lysate from  $3 \times 10^4$  cells was loaded in each lane along with BSA standards. Lanes: 1. MW marker; 2. Whole cell lysate; 3. Cytoplasmic extract; 4. Nuclear extract 1; 5. Nuclear extract 2; 6. MW marker; 7. BSA, 2.0 µg; 8. BSA 1.0 µg; 9. BSA 0.5 µg; 10. BSA 0.2 µg; 11. BSA 0.1 µg.



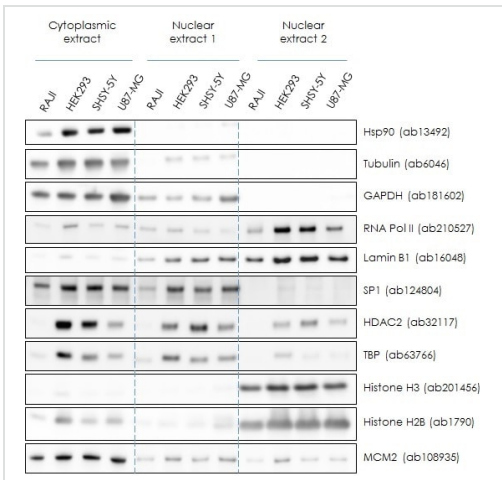
Comparison of HeLa cell fractionation by Nuclear Extract Kit ab219177 and leading commercially available nuclear fractionation kits.

Extracts were prepared from HeLa (human epithelial cell line from cervix adenocarcinoma) cells using the manufacturer's protocol and analyzed by Western blot. For each manufacturer: (1) cytoplasmic extract, (2) nuclear extract, (3) nuclear extract 2 or resolubilized insoluble nuclear fraction.



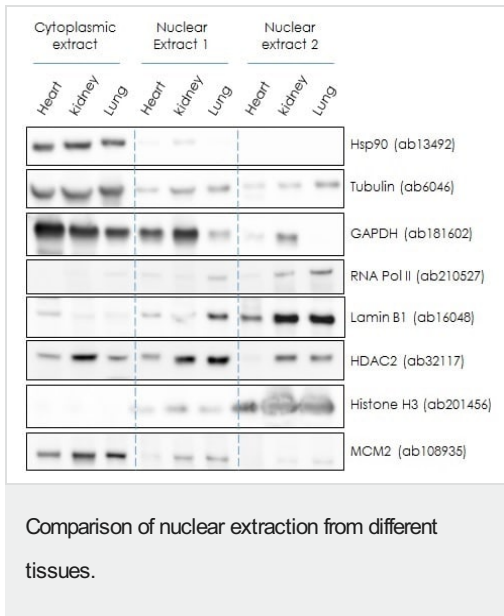
Measurement of Histone Deacetylase (HDAC) activity in HeLa cell fractions prepared using Nuclear Extract Kit ab219177.

Extracts were prepared from  $5 \times 10^6$  HeLa (human epithelial cell line from cervix adenocarcinoma) cells using Nuclear Extract Kit ab219177. Note that protease inhibitors were omitted from all buffers to prevent interference with the HDAC activity assay. The enzymatic activity of HDACs in each fraction was measured using the Histone Deacetylase (HDAC) Activity Assay Kit (Fluorometric) ([ab156064](#)). Extract from  $3 \times 10^4$  cells was used per assay test.



Comparison of nuclear extraction from different cell lines.

Extracts were prepared from  $5 \times 10^6$  cells from RAJI (human lymphoblastoid cell line), HEK-293 (human embryonic kidney cell line), SHSY-5Y (human neuroblastoma cell line) and U87-MG (human glioblastoma cell line) cell lines using Nuclear Extract Kit ab219177 and analysed by Western blot. Extract from  $3 \times 10^4$  cells was loaded per lane.



Extracts were prepared from 120 mg of mouse tissue using Nuclear Extract Kit ab219177 and analysed by Western blot. Extract from 0.4 mg of tissue was loaded per lane.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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