

Histone extraction kit

Item number: EX1521

Specification: 50T/100T

Store: 2-8°C (Store at 2-8°C before using protease inhibitor without lid, store at -20°C after using lid)

Product composition:

Name	50T	100T	Save
Reagent A: Protein extract Solution A	50mL	100mL	2-8°C
Reagent B: protein extract B	25mL	50mL	2-8°C
Reagent C: protein extract solution C	25mL	50mL	2-8°C
Reagent D: protein extract solution D	7mL	14mL	2-8°C
Reagent E: protein extract E	25mL	50mL	2-8°C
Reagent F: protein solution F	5mL	10mL	2-8°C
Reagent G: protease inhibitor mixture	100μL	100μL×2	-20°C
Instructions	1 copy	1 serving	

Product description:

The histone extraction kit provides a simple and widely used histone method. It is suitable for extracting histones from various cells and various tissues such as brain, spinal cord, nerve junctions or fibers, fat, liver, digestive tract, kidney, heart, muscle, blood vessels, connective tissue and other mammalian tissues. The extraction process is simple and convenient. The yield of histone extraction products is about 0.4mg per 10^7 cells or 100mg tissue, and the yield varies greatly among different cells and tissues. The extracted proteins can be used for Western Blotting, protein electrophoresis, histone modification experiments such as acetylation, methylation and other downstream protein studies.

Cell histone extraction

1. Extraction solution preparation: Add 2μL of reagent G into every 1mL of reagent A, mix well, and put on ice for use.
2. Collect $5-10 \times 10^6$ cells, centrifuge at 4°C, $1000 \times g$ for 5-10 minutes, carefully absorb the medium, and blot as dry as possible.
3. Wash the cells twice with cold PBS, sucking up as much supernatant as possible after each wash.
4. Add 1mL of reagent A to every $5-10 \times 10^6$ cells, mix well, and split on ice for 30min.
5. Centrifuge at 4°C and 800g for 10min, discard the supernatant and leave the precipitation.
6. Add 500μL reagent B, 800g, centrifuge at 4°C for 10min, discard the supernatant and leave the

precipitation.

7. Re-suspension precipitation with 500 μ L reagent C was carried out on the ice for 30min.
8. The supernatant was collected by centrifugation for 5min at 10000rpm at 4°C.
9. 130 μ L reagent D was added into the supernatant and thoroughly mixed, and the reaction was carried out on the ice for 60min.
10. Centrifuge at 14000rpm at 4°C for 10min, discard the supernatant and leave it for precipitation.
11. 500 μ L reagent E was washed and precipitated twice. 14000rpm, 4°C, 5min.
12. Dissolve and precipitate 50 μ L reagent F, add Loading Buffer and mix well, and boil for electrophoresis detection, or pack in -80°C refrigerator for future use.

Histone extraction from tissue

1. Preparation of extraction solution: add 2 μ L of reagent G into every 1mL of reagent A, mix well, and put on ice for use.
2. Take 30mg tissue sample and cut it into pieces, add 1mL reagent A, homogenize it with a tissue homogenizer until there is no visible solid.
3. The tissue homogenate was sucked into a pre-cooled clean centrifuge tube and cracked on ice for 30min.
4. Centrifuge at 4°C and 800g for 10min, discard the supernatant and leave the precipitation.
5. Add 500 μ L reagent B, 800g, centrifuge at 4°C for 10min, discard the supernatant, and leave for precipitation.
6. Re-suspension precipitation with 500 μ L reagent C was carried out on the ice for 30min.
7. The supernatant was collected by centrifugation for 5min at 10000rpm at 4°C.
8. 130 μ L reagent D was added into the supernatant and thoroughly mixed, and the reaction was carried out on the ice for 60min.
9. Centrifuge at 14000rpm at 4°C for 10min, discard the supernatant and leave it for precipitation.
10. 500 μ L reagent E was washed and precipitated twice. 14000rpm, 4°C, 5min.
11. Dissolve and precipitate 50 μ L reagent F, add Loading Buffer and mix well, and boil for electrophoresis detection, or pack in -80°C refrigerator for future use.

Precautions:

1. This kit is for scientific research only and is not intended for diagnosis or treatment.
2. It is best to use disposable suction heads, tubes, bottles or glassware. Reusable glassware must be cleaned and thoroughly removed before use.
3. After the completion of the experiment, all samples and contact utensils should be disposed of in accordance with the prescribed procedures.

4. Avoid skin or mucous membrane contact with the reagent

Related products:

R0020 Normal RIPA Lysate (tissue/cell)

PR1910 Rainbow 180 Broad Spectrum Protein Marker (11-180KD)

PC0020 BCA protein concentration determination kit

P1020 1×PBS buffer (pH7.2-7.4)

P10405 5 x Protein Loading buffer (including DTT)