# Blood Cell Protein Extraction Kit

**Cat:** EX1191
**Size:** 50T/100T
**Storage:** 2-8℃ (Store at 2-8℃ before using protease inhibitor without lid, store at -20℃ after using lid), valid for 1 year.

**Kit Components:**

| Kit Components | 50T | 100T | Storage |
|---|---|---|---|
| Reagent A: Protein Extract Solution A | 6mL | 12mL | 2-8℃ |
| Reagent B: Protease Inhibitor Mixture B | 100μL | 100μL×2 | -20℃ |
| specification | 1 | 1 | |

**Introduction:**

Blood cell protein extraction kit is suitable for extracting total protein from all kinds of animal whole blood cells. The extraction process is simple and convenient, and can be completed within 1h. This kit contains a unique formula that effectively dissolves cell membrane components, including the plasma membrane, nuclear membrane, and various organelle membranes. The kit contains a protease inhibitor mixture that prevents the protease from degrading the protein and ensures the extraction of high purity proteins. The proteins extracted from this kit can be used for downstream protein research experiments such as Western Blotting, protein electrophoresis, immunoprecipitation, ELISA, transcriptional activity analysis, Gel shift gel blocking assay, and enzyme activity determination. The proteins extracted by this kit are active proteins with natural protein conformation. EDTA is not present in this kit and is compatible with downstream applications such as metal chelation and chromatography.

**Self-prepared Reagents and Instruments:**

Centrifuge, oscillator, homogenizer/homogenizer, vortex mixer, pipette, refrigerator, ice box, PBS buffer, protein quantifying reagent box, centrifuge tube, suction tip, disposable gloves.

**Product Features:**

1. Easy to use, shorten the time of protein extraction to 30min-1h.
2. Containing protein stabilizer, the extracted protein is stable.
3. UV detection of protein concentration, low background interference.

**Protocols:**

**First, blood treatment**

1. Blood samples are taken using anticoagulant collection vessels.
2. Centrifuge 3000rpm for 10min. The upper layer is light yellow plasma and the lower layer is blood cells. The plasma is sucked out with a pipette gun and the remaining blood cells are frozen at -80℃.
3. The frozen blood was removed from -80℃, quickly dissolved at 37℃, and the dissolved blood was divided into 1.5mL centrifuge tubes with caps, 300μL each.

4. Add 1mL of red blood cell lysate into each tube, and use an oscillator to fully oscillate and lysate all red blood cells.
5. 4℃, 12000rpm, 10min, discard the supernatant, repeat 2-3 times.

**Second, sample protein preparation**

1. Extraction solution preparation: 100μL reagent A plus 2μL reagent B. Add 50μL cracking solution to the sample and crack on ice for 30min.
2. Centrifuge 12000rpm for 10min and remove the supernatant.
3. The protein extract was quantified and divided into -80℃ refrigerator for reserve or directly used in downstream experiment.

**Note:**

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)*
*P1040 5×Protein Loading Buffer (including DTT)*