

Plant Protein Extraction Kit(Proteomic experiments, MS)

Cat PE00035

Size 50T|100T

Shelf Life

1 year

Application

This kit is suitable for the extraction of total protein from a variety of fresh plant tissue samples. The extraction process is simple and convenient and can be completed within 1 hour. This kit contains a unique formulation that effectively solubilises cell membrane components, including cytoplasmic, nuclear and various organelle membranes. The protease inhibitor mixture contained in this kit prevents protein degradation by proteases, providing high purity protein extraction. The protein extraction components of this kit do not contain descaler components that cannot be removed by dialysis, and do not contain SDS, Triton X-100, chaps and other components that may affect mass spectrometry experiments, and the protein samples obtained at the end of the dialysis or desalination will not contain descaler, high salt concentration and other influences, which basically satisfy the downstream of any proteomics-related experimental research.

The protease inhibitor mixture of this product does not contain AEBSF, which can avoid the drift of mass spectrometry peaks caused by AEBSF, so the protein samples extracted by this product can be used for mass spectrometry (MS) detection and analysis, proteomics and other related research.

The proteins extracted in this kit are active proteins with natural protein conformation. The kit does not contain EDTA and is compatible with downstream applications such as metal chelation chromatography. The proteins extracted in this kit can also be used in downstream protein research experiments such as Western Blotting, protein electrophoresis, immunoprecipitation, ELISA, transcriptional activity analysis, Gel shift gel block assay, enzyme activity assay, and other downstream protein research experiments.

Description

Easy to use, protein extraction from cells, tissues do not need to go through grinding, repeated freezing and thawing, ultrasonic crushing and other pre-treatment.

The extraction process is simple and convenient, reducing the time of protein extraction to 30 minutes to 1 hour. Containing protein stabiliser, the extracted protein is stable.

Low background interference during UV detection of protein concentration.

Total protein extract contains a variety of active ingredients, which can fully release cytoplasmic, nuclear and membrane proteins, and also bind the released proteins to prevent precipitation.

Protease inhibitors inhibit protein degradation and the protease inhibitor formulation is optimised. The Protease Inhibitor Blend contains five separate protease inhibitors Aprotinin, Leupeptin, Pepstatin A, Bestatin, and E-64, each of which specifically inhibits one or more protease activities. The optimised composition of the mixture allows it to inhibit almost all essential protease activities, including serine proteases, cysteine proteases, aspartate proteases, alanyl-aminopeptidases and others.

Kit Composition

Protein extract A 22.5mL/45mL

Protein extract solution B 2.5mL/5mL

Protease inhibitor mixture 100μL/200μL

Storage

Protein extract A is stored at 2 to 8°C, and protein extract B and protease inhibitor mixture are stored at -20°C.

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY