ProtinEx™ Animal cell / tissue

For total Protein isolation from animal tissues and cultured cells

Description

ProtinEx™ Animal cell / tissue provides fast and easy methods for the extraction of total soluble proteins from animal cells and tissues. When extracting proteins, efficient disrupting of cells or tissues is essential for recovering whole cellular proteins. Using ProtinEx™ Animal cell / tissue's optimized procedure, the cell membranes composed of phospholipids and membrane proteins can be easily and efficiently disrupted without further treatment like sonication or freeze / thaw step. Owing to lack of ionic disturbance the denaturing power of non-ionic detergent is generally milder than that of ionic detergent. Non-ionic lytic condition of ProtinEx™ Animal cell / tissue enables the isolation of functionally active proteins which can be applied to protein-protein interaction experiments, reporter assays, protein assays, immunoassays, and protein purification.

ProtinEx™ Animal cell / tissue is designed to simplify and expedite the procedure of protein extraction. The sample harvested in ProtinEx™ Animal cell / tissue goes to incubating on ice for 5 minutes and centrifuging for 10 minutes to separate cell debris. The supernatant can be directly used for downstream applications, and the whole procedure takes only 30 minutes.

ProtinEx™ Animal cell / tissue procedure supports the extraction of proteins from up to 100 mg of animal tissues or 2 x 10^7 of animal cells per one extraction. The maximum yield reaches 11 mg per 50 mg of animal tissues and 1300 μg per 1 x 10^7 of animal cells, respectively.

Features and Benefits

- Isolate native form of proteins based on non-ionic detergent
- Direct lysis of cultured cells in a plate
- Extraction of total soluble proteins from any type of cells and tissues
- Applicable to numerous down stream applications (Western blot, BCA assay, Bradford assay, Reporter assay and etc.)

Protein Quantification Result

The protein yields using the ProtinEx™ Animal cell / tissue

(Quantitative analysis of Protein by BCA assay)

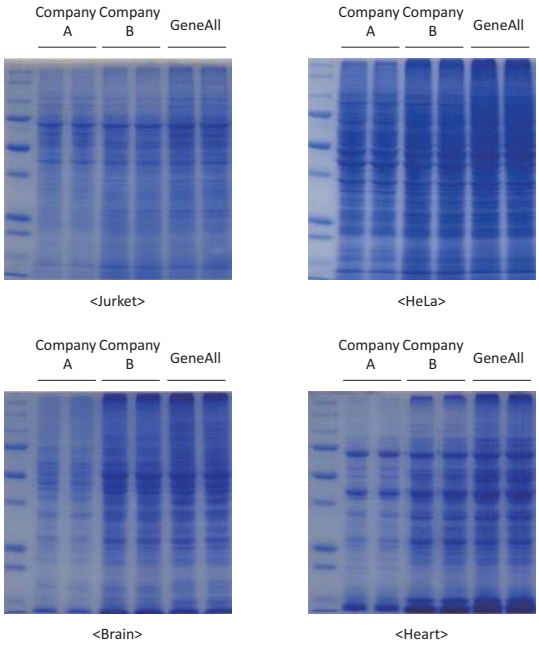
Cell lines	Amount of Starting material	Average yield of Total Protein
CHO	≒ 1 x 10^7	~ 319 μg
RAW264.7	≒ 1 x 10^7	~ 500 μg
Jurkat	≒ 1 x 10^7	~ 380 μg
Hela	≒ 1 x 10^7	~ 1300 μg

Tissue type	Amount of Starting material	Average yield of Total Protein
Liver (rat)	≒ 50 mg	~ 11.0 mg
Kidney (rat)	≒ 50 mg	~ 6.5 mg
Lung (rat)	≒ 50 mg	~ 8.1 mg
Heart (rat)	≒ 50 mg	~ 9.0 mg
Brain (rat)	≒ 50 mg	~ 7.6 mg
Stomach (rat)	≒ 50 mg	~ 10.0 mg
Spleen (rat)	≒ 20 mg	~ 5.8 mg

Cat. No.	Products	Type	Size
701-001	ProtinEx™ Animall cell / tissue	Solution	100

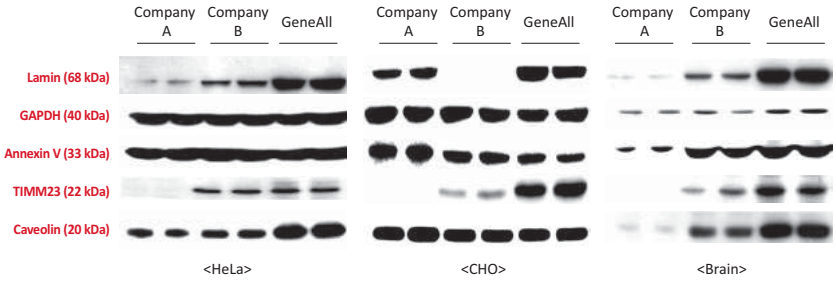
Protein Purification Results

Coomassie blue stainung by SDS-PAGE gel



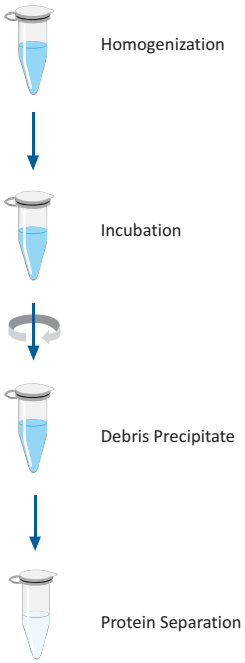
Comparison of ProtinEx™ Animal cell / tissue with other companies. To check the extracted protein of various sample type, total protein was extracted from each sample types using ProtinEx™ Animal cell/tissue.

Western Bolt



Comparison of ProtinEx™ Animal cell / tissue with other companies. To check the extracted total protein using various antibody, total protein was extracted from each sample types.

Procedures



Component list
ProtinEx™ Animal cell / tissue Total Protein Extraction Solution
Manual

PAGESTA™ Reducing 5X SDS-PAGE Sample Buffer

Description

PAGESTA™ Reducing 5X SDS-PAGE Sample Buffer is based on the method of Laemmli. PAGESTA™ Reducing 5X SDS-PAGE Sample Buffer is designed for loading of protein samples in SDS-PAGE analysis.

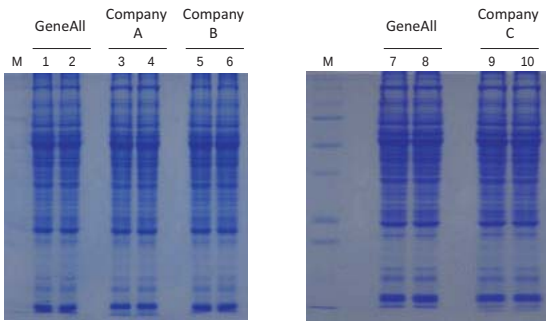
Features and Benefits

- Based on Laemmli method
- Clear visualization of bands
- 5X concentrated buffer adjusts the quantity of loaded proteins
- Save cost and time for SDS-PAGE

Buffer Composition

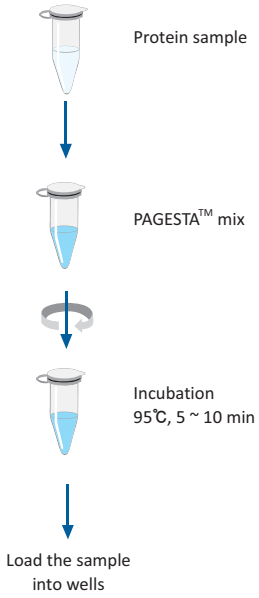
PAGESTA™ Reducing 5X SDS-PAGE Sample Buffer	
Tris-HCl (pH 6.8, 25°C)	250 mM
Glycerol	25%
Sodium dodecyl sulfate (SDS)	10%
Bromophenol Blue	0.1%
DTT	0.5 M

Coomassie Blue Staining by SDS-PAGE Gel



(Sample : Liver 100 mg / prep, Loading : 30 μg / lane)
Lane 1, 2, 7, 8 : GeneAll PAGESTA™
Lane 3, 4 : Company A
Lane 5, 6 : Company B
Lane 9, 10 : Company C

Procedures



Component list

PAGESTA™
Reducing 5X SDS-PAGE Sample Buffer
Manual

Cat. No.	Products	Type	Size
751-001	PAGESTA™ Reducing 5X SDS-PAGE Sample Buffer	Solution	1 ml x 10 tubes