

2013
NEW!!

ATTO NEW REAGENT KIT for *Protein extraction and Organelle fractionation & extraction*

“New approach brings you a new discovery!
Organelle extraction enables you to find your target more conveniently!”

WSE-7420 EzRIPA Lysis kit

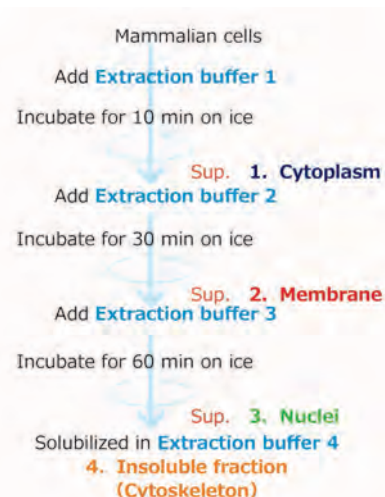
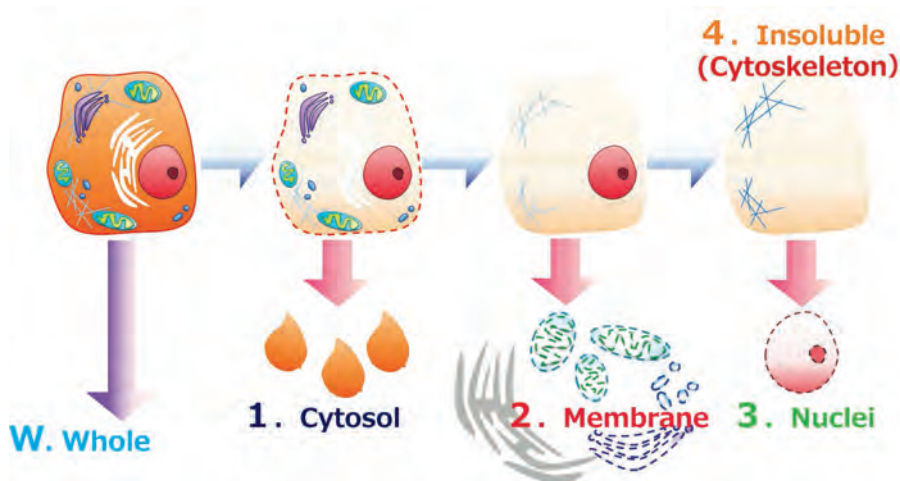
RIPA lysis buffer for protein extraction from mammalian cells or tissue samples.

- ✓ Sample preparation for electrophoresis, immunoprecipitation, ELISA, enzyme activity experiments, etc.
- ✓ Standard set includes Protease inhibitor and Phosphatase inhibitor.
- ✓ Since EzRIPA Lysis kit is amine-free buffer that based on HEPES buffer, labeling experiments of prepared sample can be applied directly.

WSE-7421 EzSubcell Extract

Subcellular Fractionation kit separates and extracts Cytosol, Nuclei, Membrane, insoluble protein from mammalian cells.

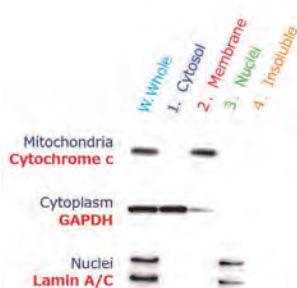
- ✓ Sample preparation for electrophoresis, immunoprecipitation, ELISA, chromatin immunoprecipitation assay, enzyme activity experiments, etc.
- ✓ Simple operation by centrifuging after addition of four extraction buffers stepwisely.
- ✓ Additionally required material is only cooled centrifuge(to10,000 x g).
- ✓ Process for all fractionation is completed in 3 hours.
- ✓ Either Fractionated cell from mammalian tissue or frozen cell is available.



Data 1

Expression of organelle marker protein

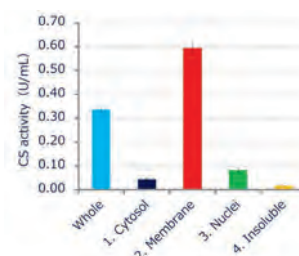
The result of western blotting of the nuclear & mitochondrial extracts from SW480 cells are shown. The data demonstrated that the organelle specific marker protein is detected in each fraction. So that EzSub-cell extract can easily separate & extract each organelle fraction without cross contamination.



Data 2

Confirmation of enzyme activity of organelle fraction

The data shows the measured result of CS (Citrate Synthase) activity of each fraction. CS is localized in mitochondria. The right graph shows the membrane fraction has high enzymatic activity, and reveals that CS activity is keeping during extraction.



it could be inactive depending on enzyme.

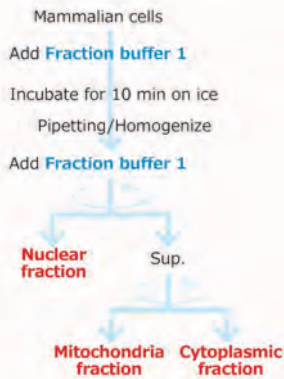
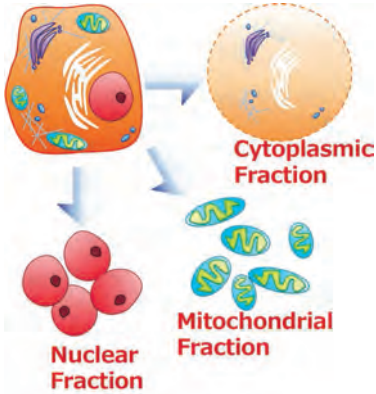
**2013
NEW!!**

ATTO NEW REAGENT KIT for *fractionation of Nuclei & Mitochondria*

WSE-7422 EzSubcell Fraction

Subcellular Fractionation kit that fractionates Nuclear, Mitochondria and Cytoplasmic fractions from mammalian cells.

- ✓ Sample preparation for electrophoresis, immunoprecipitation, ELISA, chromatin immunoprecipitation assay, enzyme activity & bioactivity experiments, etc.
- ✓ Simple preparation of organelle fractionation in high reproducibility and purity.
- ✓ Additionally required material is only cooled centrifuge(to10,000 x g).
- ✓ Process for all fractionation is completed in 2 hours.
- ✓ Detergent or non-detergent method is available.

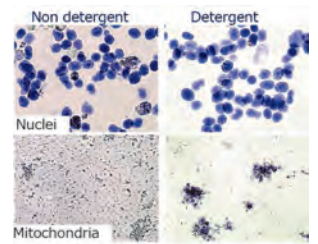


Data 1

Trypan blue stained images of Nuclear and Mitochondrial fraction

The images of trypan blue stained nuclei and mitochondria isolated from Hela cell are shown.

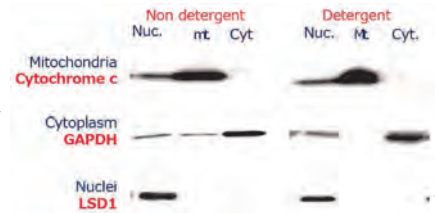
Either non-detergent or detergent method successfully isolated and purified intact nuclei and mitochondria.



Data 2

Expression of Organelle marker protein

The data shows the result of each fraction that extracted from Hela cell, in western blotting method. Whether non-detergent or detergent method, organelle specific marker proteins can be detected in each fraction. (fewly contamination of other organelle was detected)



	WSE-7420 EzRIPA Lysis kit	WSE-7421 EzSubcell Extract	WSE-7422 EzSubcell Fraction
Code	2332336	2332337	2332338
Package	EzRIPA Lysis buffer : 100mL 20mMHEPES(pH7.5), 1%IGEPAL®CA630, 0.1%SDS, 0.5%deoxycholic acid, 150mMSodium chloride Protease inhibitor (100x) : 1mL Aprotinin, PepstatinA, Leupeptin Phosphatase inhibitor (100x) : 1mL Sodium fluoride, Sodium orthovanadate(V), βSodium glycerophosphate	Extraction buffer 1: 50mL Extraction buffer 2: 50mL Extraction buffer 3: 25mL Extraction buffer 4: 25mL Protease inhibitor : 1.25mL DNase I : 0.25mL	Fraction buffer 1 : 50mL Fraction buffer 2 : 50mL RIPA Lysis buffer : 20mL Detergent mix (50x) : 1mL Protease inhibitor (100x): 0.7mL
Volume	100 Samples	50 Samples	50 Samples
Sample volume	1 sample : to 2 x 10 ⁷ cell	1 sample : to 2 x 10 ⁷ cell	1 sample : to 2 x 10 ⁷ cell
Applica-tion	Electrophoresis/ Western blotting/ Immunoprecipitation/ ELISA/ Enzyme activity/ etc.	Electrophoresis/ Western blotting/ Immunoprecipitation ELISA/ chromatin immunoprecipitation assay/ Enzyme activity/ etc.	Electrophoresis/ Western blotting/ Immunoprecipitation/ ELISA/ Bioactivity/ Protein purification/ Chromatin immunoprecipitation assay/ Enzyme activity/ etc.
Storage	Inhibitor at -20°C for 1 year (cold transportation is available)	Inhibitor and enzyme at -20°C for 1 year (cold transportation is available)	Inhibitor and detergent mix at -20°C for 1 year (cold transportation is available)



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