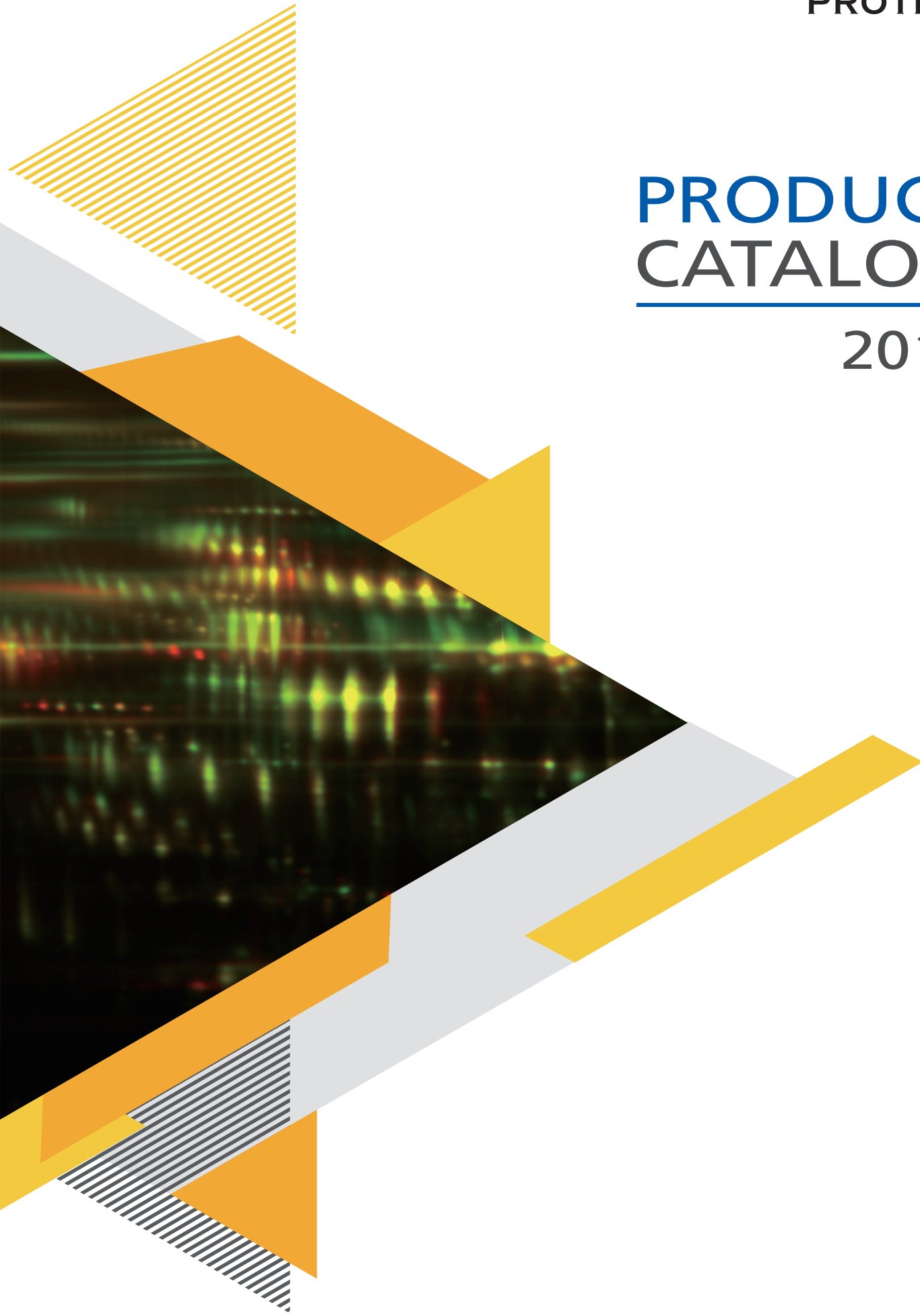


VISUAL
PROTEIN

PRODUCT CATALOG

2019



About Visual Protein



Visual Protein was established in Taiwan in 2005, we dedicate to enhancing biological science developments by providing services and innovative products for research use. In 2015, Visual Protein joined forces with Energenesis Biomedical Co., Ltd. With the resource and support of Energenesis Biomedical, Visual Protein will keep provide effective products and ensure our clients reliable results. Our vision for the future is to facilitate better solutions for advanced research and development.

Based on our principle of solving problems in experiments, we offer high quality products for: (1) Western Blotting; (2) Protein Purification; (3) Antibody Production; (4) Proteomics; (5) Buffer.

Now, our partners represent us in more than 20 countries, including Belgium, China, Chile, Czech, Denmark, Estonia, Finland, Germany, India, Israel, Japan, Korea, Latvia, Lithuania, Luxembourg, Netherlands, Russia, Singapore, South Africa, Sweden, the United Kingdom, and the United States.

For more information, please feel free to contact us.

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ceo



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1

Western Blotting

LuminolPen™ Series
VisColor™ Series
BlockPRO™ Series
LumiFlash™ Series
Western Blot Tool Box

LuminolPen™ HRP System

LuminolPen™ HRP System is the world's first luminescent color development marker pen. The enzyme-based property makes it suitable for most brands of the ECL substrate.

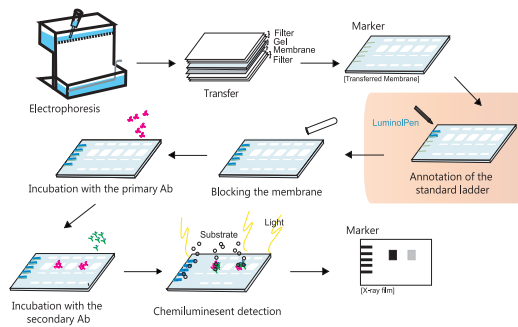


LH03-50

Advantages

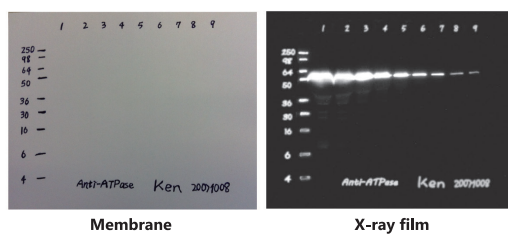
- Unique: the world's first luminescent color development marker pen
- Reliable: help you to evaluate the efficacy of your ECL substrate
- Convenient: able to make note and show on the image with the data result
- Compatible: applicable with most brands of the ECL substrate

Performance



Application of the LuminolPen™ HRP System (LH03) in Western blotting

After transferring gel proteins onto PVDF or nitrocellulose membrane and before the procedure of blocking, use LuminolPen™ HRP System to annotate the pre-stained marker and perform the following hybridization procedures.



Labeling molecular weight and taking note on the membrane with LuminolPen

The position of the pre-stained marker and the protein signals will be observed on one single image.

Ordering Information

LuminolPen™ HRP System

LH03-50	About 1,000 membranes drawing	1 pen
LH03-10	About 100 membranes drawing	1 pen

LuminolPen™ Lite HRP System

LuminolPen™ Lite HRP System is a second generation product of LuminolPen™ Series which is also designed for chemiluminescent detection in Western blot. LH604-200/LH604-30 is designed for drawing a blot which will be exposed in 10 mins. LH604-200L / LH604-30L is for using when longer exposure time is required (10 mins to 1 hour).

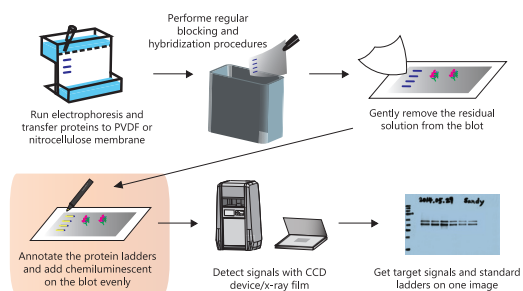


LH604-200

Advantages

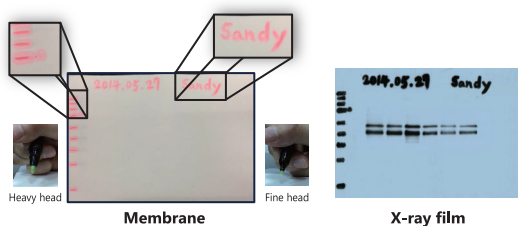
- More Choice: there are two pens for different exposure time and usage count to be chosen
- More Convenient: just writing before adding chemiluminescent substrates

Performance



Application of the LuminolPen Lite (LH604) in Western blotting

Before adding chemiluminescent substrate, use the LuminolPen™ Lite to annotate the prestained marker on the membrane and perform the following detection process.



Taking notes for experimental management

LuminolPen™ Lite HRP System provides easy writing double heads, the heavy head and the fine head, for different purpose of writing.

Ordering Information

LuminolPen™ Lite HRP System

LH604-200	About 500 membranes drawing; for exposure time within 10 minutes	1 pen
LH604-30	About 100 membranes drawing; for exposure time within 10 minutes	1 pen
LH604-200L	About 500 membranes drawing; for long exposure time up to 1 hour	1 pen
LH604-30L	About 100 membranes drawing; for long exposure time up to 1 hour	1 pen

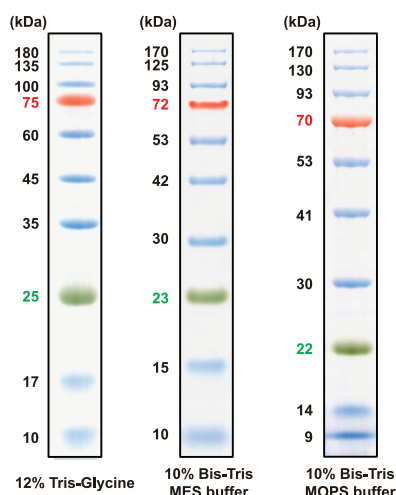
VisColor™ Pre-stained Protein Marker

VisColor™ Pre-Stained Protein Marker is a three-color protein standard with 10 pre-stained proteins from 180 to 10 kDa. In the pre-stained marker, eight of proteins are covalently coupled with blue dye and the other two proteins are covalently coupled with other color dye (one red band at 75 kDa and one green band at 25 kDa). The pre-stained marker is designed for monitoring the progress of SDS-PAGE and checking transfer efficiency onto PVDF and NC membranes in Western blotting. The VisColor™ Pre-Stained Protein Marker is ready to use with no heating, diluting or additional reducing agent necessary before loading.

Advantages

- Size range: 10 proteins from 180 to 10 kDa
- Sharp bands: Color-coded bands of similar intensity for easy visualization
- Ready-to-use: Direct loading on gels without boiling or diluting

Performance



Band pattern of the VisColor Pre-Stained Protein Marker.

5 μ L of VisColor Pre-Stained Protein Marker on a (A) 12% Tris-Glycine SDS-PAGE, (B) 10% Bis-Tris SDS-PAGE with MES buffer, (C) 10% Bis-Tris SDS-PAGE with MOPS buffer.

5 μ L of VisColor™ Pre-Stained Protein Marker on a 12% Tris-Glycine, 10% Bis-Tris MES, and 10% Bis-Tris MOPS SDS-PAGE (180 - 10 kDa).

Ordering Information

VisColor™ Pre-Stained Protein Marker

VC01-250 250 μ L X 1

VC01-500 250 μ L X 2

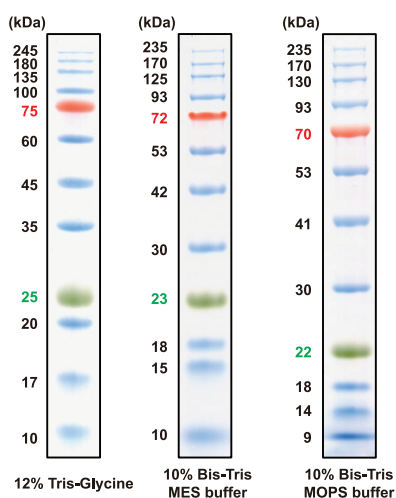
VisColor™ Full-Range Pre-stained Protein Marker

VisColor™ Full-Range Pre-Stained Protein Marker is a three-color protein standard with 12 pre-stained proteins from 245 to 10 kDa. In the pre-stained marker, ten of proteins are covalently coupled with blue dye and the other two proteins are covalently coupled with other color dye (one red band at 75 kDa and one green band at 25 kDa). The pre-stained marker is designed for monitoring the progress of SDS-PAGE and checking transfer efficiency onto PVDF and NC membranes in Western blotting. The VisColor™ Full-Range Pre-Stained Protein Marker is ready to use with no heating, diluting or additional reducing agent necessary before loading.

Advantages

- Size range: 12 proteins from 245 to 10 KDa
- Sharp bands: Color-coded bands of similar intensity for easy visualization
- Ready-to-use: Direct loading on gels without boiling or diluting

Performance



Band pattern of the VisColor Pre-Stained Protein Marker.

5 μ L of VisColor Pre-Stained Protein Marker on a (A) 12% Tris-Glycine SDS-PAGE, (B) 10% Bis-Tris SDS-PAGE with MES buffer, (C) 10% Bis-Tris SDS-PAGE with MOPS buffer.

5 μ L of VisColor™ Full-Range Pre-Stained Protein Marker on a 12% Tris-Glycine, 10% Bis-Tris MES, and 10% Bis-Tris MOPS SDS-PAGE (245 - 10 kDa).

Ordering Information

VisColor™ Full-Range Pre-Stained Protein Marker

VC03-250 250 μ L X 1

VC03-500 250 μ L X 2

BlockPRO™ Blocking Buffer

BlockPRO™ Blocking Buffer is suitable for blocking in Western blot, ELISA, immunohistochemistry and other immunochemical application. It can block the excess binding site but not cover on the binded protein of the membrane and therefore increase the signal intensity, presenting better data result than milk and BSA blocking buffer.

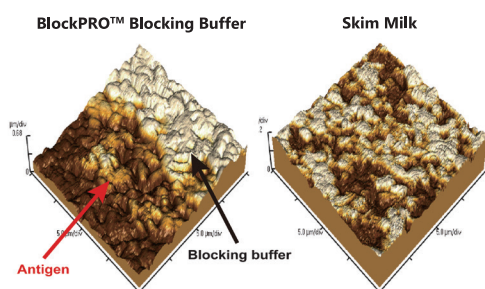


BP01-1L

Advantages

- Increase signal intensity without covering the antigen
- Phosphoprotein-free and biotin-free
- Safe and ready to use

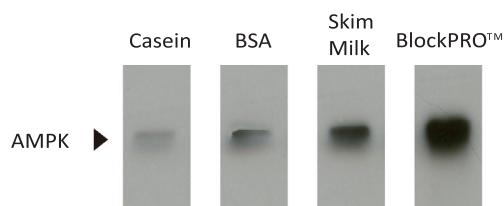
Performance



Effective Blocking

Blocking with skim milk or BlockPRO™ Blocking Buffer and detect by SEM.

30 µg cell lysate (HepaG2) was separated by 12.5% SDS-PAGE and blocked by skim milk or BlockPRO™ Blocking Buffer. Membranes detected by SEM. The SEM result showed that BlockPRO™ Blocking Buffer only blocks the excess binding site and reveals the position of antigen and therefore will not reduce the signal intensity.



Better Signal Intensity than Traditional Blocking Agents

Signal strength comparison of Casein, BSA, milk, and BlockPRO™ Blocking Buffer. 30 µg cell lysate (HepaG2) was separated by SDS-PAGE and detected with anti-AMPK (mouse, 1:1,000). Secondary antibody: anti-mouse IgG-HRP 1:10,000. Membrane: Hyond™ P. Detection: Hyperfilm™ ECL. All results were exposed for 30 seconds and capture by X-ray film.

Ordering Information

BlockPRO™ Blocking Buffer

BP01-1L	500mL x 2	1 kit
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BlockPRO™ Protein-Free Blocking Buffer

BlockPRO™ Protein-Free Blocking Buffer is a non-protein formulation which enhances sensitivity and minimizes background noise, presenting better results than traditional protein-based blocking buffer in immunoassays. The synthetic formulation of BlockPRO™ Protein-Free Blocking Buffer makes it suitable for PVDF and nitrocellulose platform, avidin/biotin system, detection of phosphoprotein, and other immunochemical applications.

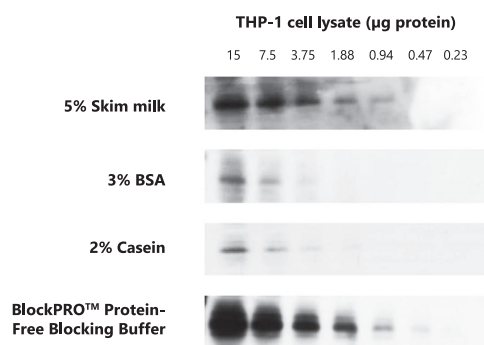


BF01-1L

Advantages

- Protein-free, reduce non-specific cross-reaction
- Suitable for Western blot, dot blot, ELISA, and other immunoassays
- Increase signal intensity

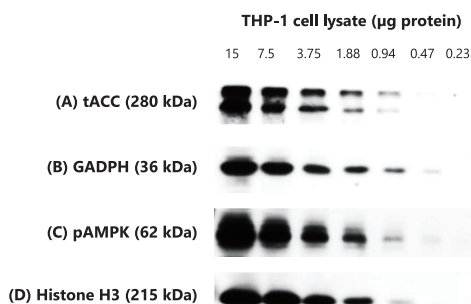
Performance



Better Sensitivity & Less Background Noise

BlockPRO™ Protein-Free Blocking Buffer is better than protein-based blocking buffers (skim milk, BSA and casein) for detection of target protein in Western blotting.

Sample: THP-1 cell lysates
 Blocking time: 1 hour
 Target antigen: pAMPK
 Exposure time: 30 sec



Suitable For Multiple Protein Antigens

BlockPRO™ Protein-Free Blocking Buffer is suitable for detection of different kinds of proteins.

Sample: THP-1 cell lysates
 Blocking time: 1 hour
 Target antigen: (A) tACC; (B) GADPH; (C) pAMPK; (D) Histone H3
 Exposure time: 30 sec

Ordering Information

BlockPRO™ Protein-Free Blocking Buffer

BF01-1L	500mL x 2	1 kit
BF10-100	100mL (10 x Conc.) x 1	1 kit
BF10-200	100mL (10 x Conc.) x 2	1 kit
BF20-50P	2.5 ml (20 x Conc.), 20 packs	1 kit

LumiFlash™ Prime Chemiluminescent Substrate

LumiFlash™ Prime Chemiluminescent Substrate is a ready-to-use reagent for chemiluminescent detection of immobilized proteins (Western blotting), conjugated with horseradish peroxidase (HRP) directly or indirectly. In the presence of hydrogen peroxide, HRP catalyzes the oxidation of cyclic diacylhydrazides, such as luminol, and light emits. LumiFlash™ Prime Chemiluminescent Substrate provides a convenient way to visualize HRP-based detection. Simply mix and add the solution onto the membrane, the signal of the target protein can be recorded by exposure to X-ray film or compatible image acquisition system.

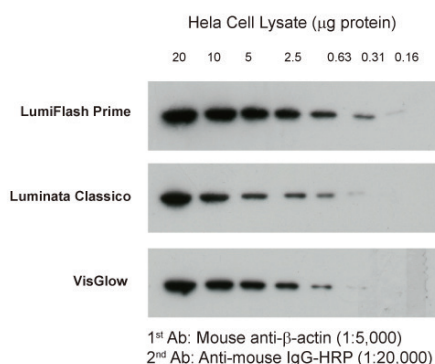


LF01-500

Advantages

- High sensitivity: detect protein target to picogram level
- Low background: provide low background on the WB result
- Economic: offer excellent quality with lower price

Performance



Economic and stable ECL substrate for Western blotting

The comparison of signal intensity of LumiFlash Prime, VisGlow and Luminata Crescendo by Western blotting.

Hela cell lysate with 1/2 serial dilution from 20 μg was separated by 12.5% SDS-PAGE and probed by anti β -actin. All results were exposed to X-ray film for 1 minute.

Ordering Information

LumiFlash™ Prime Chemiluminescent Substrate

LF01-100	50mL solution A + 50mL solution B	1 kit
LF01-500	250mL solution A + 250mL solution B	1 kit

< LumiFlash™ Ultima Chemiluminescent Substrate

LumiFlash™ Ultima Chemiluminescent Substrate is an advanced ECL product for chemiluminescent detection of immobilized proteins (Western blotting and ELISA). LumiFlash™ Ultima Chemiluminescent Substrate provides high sensitivity and long signal duration in Western blotting. It needs very short exposure time to the X-ray film or other documentation systems, and it provides low background and high signal with clear image. LumiFlash™ Ultima is a perfect choice for most Western blotting application.

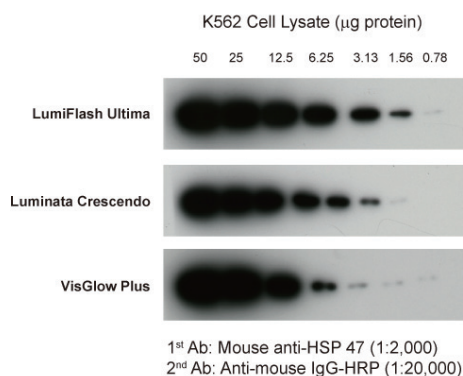


LF08-500

Advantages

- High sensitivity: detect protein target to low-picogram level
- Long duration: provide stable signal for long time exposure
- Economic: cost less than other ECL substrate of similar sensitivity level

Performance



High signal sensitivity and long signal duration

The comparison of signal intensity of LumiFlash Ultima, VisGlow Plus and Luminata Crescendo by Western blotting. K562 cell lysate with 1/2 serial dilution from 50 µg was separated by 12.5% SDS-PAGE and probed by anti HSP 47. All results were exposed to X-ray film for 3 minutes.

Ordering Information

LumiFlash™ Ultima Chemiluminescent Substrate

LF08-100	50mL solution A + 50mL solution B	1 kit
LF08-500	250mL solution A + 250mL solution B	1 kit

LumiFlash™ Infinity Chemiluminescent Substrate

LumiFlash™ Infinity Chemiluminescent Substrate is an extremely sensitive enhanced chemiluminescent substrate for femtogram-level detection of immobilized proteins (Western blotting). In Western blotting or ELISA application, LumiFlash™ Infinity Chemiluminescent Substrate provides high signal and low background, which allows detection of target protein on PVDF or nitrocellulose. This feature benefits the researchers with excellent low background result and without signal burn effect at the same time.

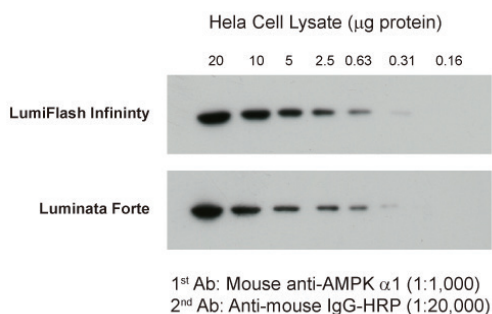


LF16-500

Advantages

- High sensitivity: detect protein target to femtogram level
- Low background: provide insignificant background and avoid non-specific signals on the WB result
- Antibody saving: use very low antibody concentration on the WB and ELISA application

Performance



A highly sensitive ECL substrate for Western blotting

The comparison of signal intensity of LumiFlash Infinity and Luminata Forte by Western blotting. Hela cell lysate with 1/2 serial dilution from 20 µg was separated by 12.5% SDS-PAGE and probed by anti AMPKα1. All results were exposed to X-ray film for 5 minutes.

Ordering Information

LumiFlash™ Infinity Chemiluminescent Substrate

LF16-100	50mL solution A + 50mL solution B	1 kit
LF16-500	250mL solution A + 250mL solution B	1 kit

Western Blot Tool Box

The Western Blot Tool Box is designed to conveniently provide reagents/buffers needed for Western blotting, from cell lysis, protein quantification, protein separation, protein transfer, antibody incubation, and chemiluminescent detection. All items on this all-in-one box are available individually.



BOX12-03

Advantages

- An all-in-one box of commonly used reagents/buffers for Western Blotting
- Ensure fresh-made buffers with individual packing of each buffer
- Long shelf life

Product Name	Cat. No.	BOX12	BOX12-03	BOX12-04	Content	Working Reactions
RIPA Cell Lysis Buffer (5X)	RP05-10	●	●	●	10 mL	50 runs of cell lysis
Dual-Range™ BCA Protein Assay Kit	BC03-100					
-Reagent A	BC03-100A	●	●	●	100 mL	50 tube assays or 500 microplate assays
-Reagent B	BC03-100B				2 mL	
-Albumin Standard (2 mg/mL)	BC03-100S				1 mL	
SDS-PAGE Running Buffer	RB500	●	●	●	10 Powder Packs	10 runs of mini-gels
Western Blot Transfer Buffer	WTB500	●	●	●	10 Powder Packs	10 runs of mini-gel transfer
BlockPRO™ Protein-Free Blocking Buffer (20X)	BF20-50	●	●	●	10 Packs	10 blots
TBS Tween-20 Buffer (25X)	TBST200	●	●	●	10 Packs	10 blots
LuminolPen, HRP System	LH03-10	-	●	-	1 Pen	100 membrane use
LuminolPen Lite, HRP System	LH604-30	-	-	●	1 Pen	100 membrane use
LumiFlash™ Ultima Chemiluminescent Substrate, HRP System	LF08-100	●	●	●	50 ml Soln A + 50 ml Soln B	50-100 blots (0.1 mL/cm ²)

Ordering Information

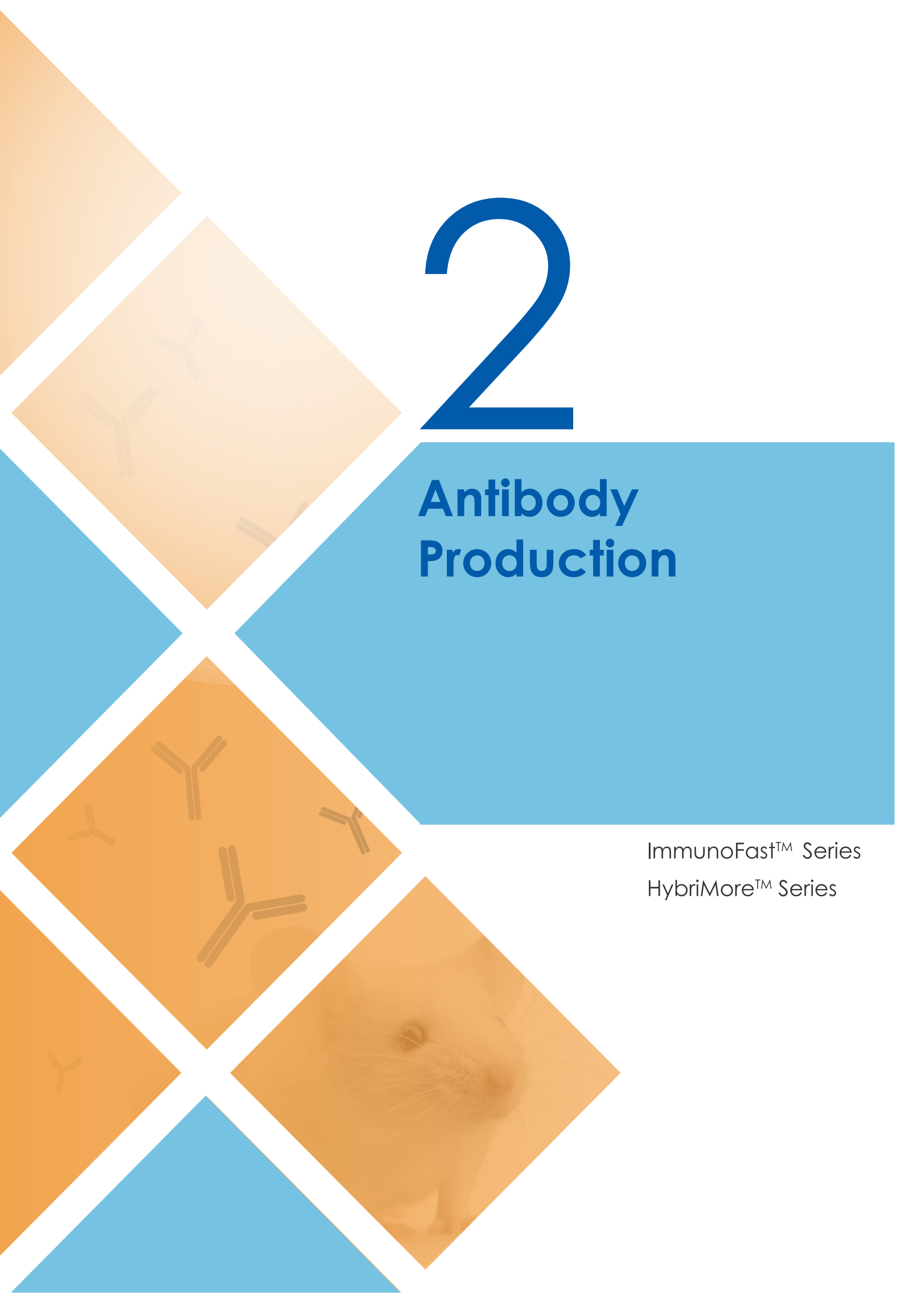
Western Blot Tool Box

BOX12	7 items in one box	1 kit
BOX12-03	7 items with LuminolPen (#LH03-10)	1 kit
BOX12-04	7 items with LuminolPen Lite (#LH604-30)	1 kit

2

Antibody Production

ImmunoFast™ Series
HybriMore™ Series



ImmunoFast™ Adjuvant

ImmunoFast™ Adjuvant is a new aqueous emulsify adjuvant which can efficiently elicit significant immunorespond and induce high amount of IgG production in very short time. The aqueous texture makes antigen mixture and injection much easier and the special designed non-toxic formula provides higher survival rate of immunize animal during experiment period.

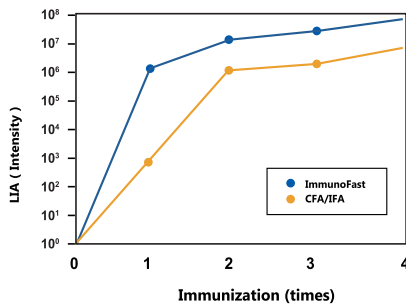


IF01-4N

Advantages

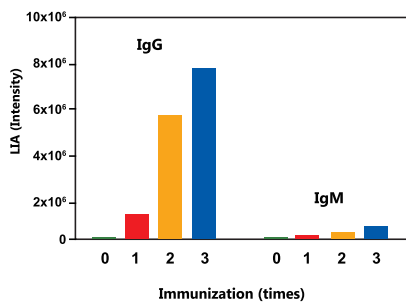
- Applicable with various kind of antigenes, especially the low molecular weight antigen
- Stronger immunoresponse, less antigen loading
- Aqueous texture for easy use

Performance



ImmunoFast can elicit strong immune response in animals in a short time

After performing a regular immunization procedure on mice, ImmunoFast delivers approximate 10 fold stronger Ab titer than CFA (Complete Freud's adjuvant) and IFA (Incomplete Freud's adjuvant). ImmunoFast may also shorten the period of immunization with sufficient Ab titer.



ImmunoFast elevate the production of IgG

Levels of the elicited immunoglobulin molecules in an ImmunoFast™ boosted animal. The mice was immunized with 50 µg of bovine serum albumin in ImmunoFast™ adjuvant and then it was boosted with the same adjuvant at the 2nd, 4th and 6th week. The titers of IgG and IgM were measured by ELISA.

Ordering Information

ImmunoFast™ Adjuvant

IF01-4N	For 4 injections for mouse	1 kit
IF01-20N	For 20 injections for mouse	1 kit

HybriMore™ Hybridoma Cloning Factor

HybriMore™ Hybridoma Cloning Factor is a special supplement which is added in the culture medium when culturing hybridoma cells. It can substantially provide growth promoting substances during cell culture and therefore successfully increase the cloning efficiency and raise the survival rate of hybridoma cell. No negative effect to hybridoma cell with defined chemical component and defined concentration.

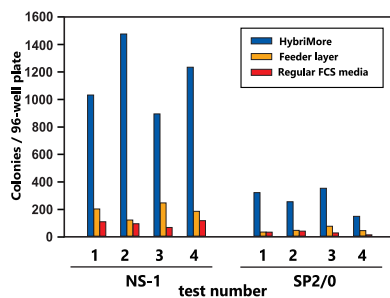


HB01-1L

Advantages

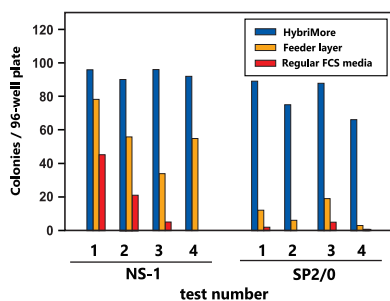
- Increase cloning efficiency and cell survival rate
- Culturing hybridoma cells with better antibody secretion and production
- Contain growth promoting supplement with defined chemical component and concentration

Performance



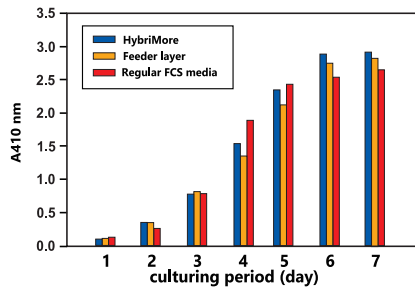
A significant higher cloning efficiency was observed in the usage of HybriMore

The newly PEG fused hybridoma cells were plated onto a 96-well plate containing FCS media with HybriMore, FCS media with feeder layer, or regular FCS media. Hybridoma cells were subject to HAT selection 14 days after the cell fusion. Two mouse myeloma fusion partners, NS-1 and SP2/0, were evaluated by four independent fusion experiments with freshly prepared mouse spleens.



Increase the successful rate of monoclonization during monoclonization

The number of viable hybridoma colonies in a well was visually counted under a microscope. A significant higher successful rate (almost 100%) of monoclonization was observed with the usage of HybriMore, which was higher than those of the regular FCS media (10-40%) and the feeder layer (50-80%).



Defined chemical with no animal source materials and no effect on cell physiology

A clone of hybridoma cells (anti human transferrin, L3B5) was cultured in the media containing FCS media with HybriMore, FCS media with feeder layer, or regular FCS media for seven days. The supernatants were harvested and examined by the titer of secreting Ab by ELSIA assay. The usage of HybriMore will not alter the yield of secreting Ab in hybridoma cells.

Ordering Information

HybriMore™ Hybridoma Cloning Factor

HB01-1L

For 1L culture medium dilution

1 bottle

3

Protein Purification

ExtractPRO™ Series
FracPRO™ Series
PhosPRO™ Series

< RIPA Cell Lysis Buffer, 5X

RIPA Cell Lysis Buffer is used to lyse mammalian cells from adherent or suspension cells in culture. It enables the extraction of cytoplasmic, membrane and nuclear proteins and is compatible with many applications, including reporter assays, protein assays, immunoassays and protein purification. RIPA Cell Lysis Buffer supplied as a 5-fold concentrated solution, which when reconstitute to 1X concentration, contains: 25mM Tris-HCl pH 7.6, 150mM NaCl, 1% NP-40, 1% sodium deoxycholate, 0.1% SDS, and it could applied on 500 runs of protein isolation of cells in microcentrifuge tube (1 ml for 0.5 to 5 x 10⁷ cells).

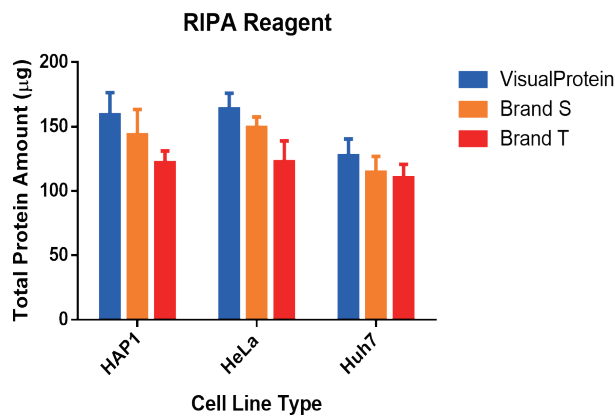


RP05-100

Advantages

- Universal: suitable for extraction of cytoplasmic, membrane and nuclear proteins
- Compatible: RIPA cell lysis is compatible with downstream application of immunoprecipitation, protein assays, immunoassays and protein purification.

Performance



Ensure the most amount of extracted protein

Comparison of the total protein amount from extraction of HAP1, HeLa and Huh 7 cell line (5x10⁶) with RIPA Cell Lysis Buffer (#RP05-100) and with two competitors' products indicates that our RIPA Cell Lysis Buffer ensures the highest protein amount among the three products.

Ordering Information

RIPA Cell Lysis Buffer, 5X

RP05-100 100 mL of 5X solution

1 bottle

ExtractPRO™ Protein Extraction Reagent

ExtractPRO™ Protein Extraction Reagent is a new formula reagent for extracting proteins from a wide range of bio-samples and it can remove most of DNA, RNA, and cell debris with a simple extraction procedure. ExtractPRO™ Protein Extraction Reagent can effectively protect the protein sample without using protease inhibitor and the sample can also be preserved for long term after using ExtractPRO™ reagent.

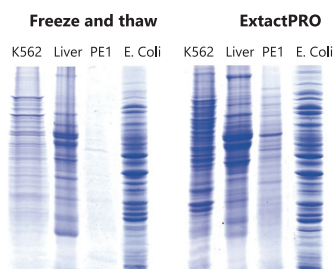


EP05-30

Advantages

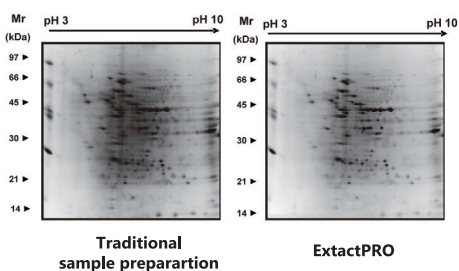
- Yields of the extracted protein are higher with ExtractPRO than with freeze & thaw
- Ensure high quality extracted proteins than freeze & thaw
- The extracted protein is well preserved during long-term storage in ExtractPRO reagent

Performance



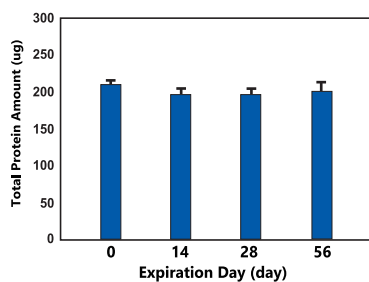
ExtractPRO presents better protein extract efficiency than freeze & thaw

The protein portion of cell line (K562), animal tissue (pig liver), fungi (PE1), and bacteria (E. coli) were extracted by freeze & thaw or ExtractPRO, separated with 12.5% SDS-PAGE, and stained by CBR method.



Less background noise in the 2DE result of the protein sample

The 2-DE results of protein sample from HepaG2 cell which was isolated by ExtractPRO (right) has lower background than the one treated with traditional freeze & thaw (left).



The extracted protein is stable in ExtractPRO reagent

The extracted protein from cell line SP-2 was preserved in ExtractPRO without protease inhibitor for 56 days. The total protein amount was quantified by Bradford method and the results showed that there's no significant difference during storage.

Ordering Information

ExtractPRO™ Protein Extraction Reagent

EP05-30	30mL x 1	1 bottle
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◀ FracPRO™ Protein Fractionation Kit

The FracPRO™ Protein Fractionation Kit is a simple, reproducible and ultracentrifuge-independent method to separate four subcellular protein fractions, including nuclear, cytosol, membrane/organelle, and cytoskeletal fractions, in a detergent-based procedure. The FracPRO™ Protein Fractionation Kit takes advantage of the differential solubility of proteins in various subcellular compartments and utilizes highly specialized fractionation buffers to target specific subcellular compartments and simultaneously preserves the structural integrity of the proteins during each sequential fractionation.

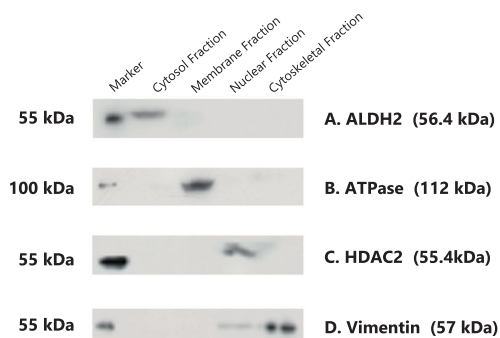


FP01-50

Advantages

- Suitable to variable sample application including cultured cells and mammalian tissues
- Separate and collect four subcellular protein fractions in short time
- Isolate high quality protein fractions with easy procedure

Performance



Separate four protein fraction with one kit

The fractionation efficacy of FracPRO™ Protein Fractionation Kit is presented by Western blot.

Sample: Human leukemia cell line (K562)
 (A) Heat shock protein 70 antibody
 (B) ATPase antibody
 (C) Histone deacetylase 2 antibody
 (D) Vimentin antibody.

Ordering Information

Ordering Information

FracPRO™ Protein Fractionation Kit

FP01-5	10mL Cytosol buffer + 10mL Membrane/Organelle buffer + 7.5mL Nuclear buffer + 1.5mL Cytoskeletal buffer	1 kit
FP01-50	100mL Cytosol buffer + 100mL Membrane/Organelle buffer + 75mL Nuclear buffer + 15mL Cytoskeletal buffer	1 kit

PhosPRO™ Phosphoprotein Enrichment Kit

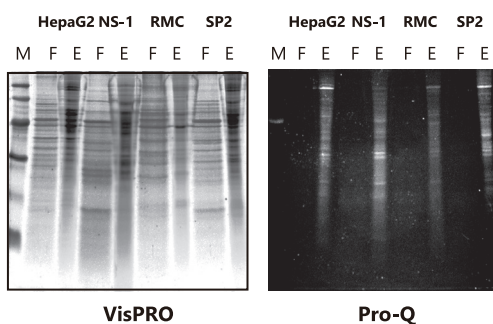
PhosPRO™ Phosphoprotein Enrichment Kit can specifically purify the phosphoprotein from the protein sample by simple process with our proprietary chromatographic technology. PhosPRO™ Phosphoprotein Enrichment Kit can also successfully purify phosphoprotein from different biological materials, such as animal, plant, and microorganism, and is suitable for applying quality required analysis.



Advantages

- More flexible: PhosPRO™ provides stringent buffer stock for customer to optimize washing condition for their sample and to maximize target phosphoprotein purification result.
- More choices: PhosPRO™ series have 2 versions with 2 different packages for different purposes .

Performance



Enrichment of the phosphoprotein from the protein sample

HepaG2: Human hepatocellular liver carcinoma cell line
 NS-1: Mouse myeloma cell line NS-1
 RMC: Rat mesangial cell
 SP2: Mouse myeloma cell line SP2
 F: Flow through
 E: Eluent

VisPRO™ 5 Minute Protein Stain Kit and Pro-Q Diamond stain (Pro-Q, Invitrogen) were used for developing total proteins or phosphoproteins.

Ordering Information

PhosPRO™ Phosphoprotein Enrichment Kit

PP03-2C	2 pre-packed column + 2mL Lysis buffer buffer + 250mL System buffer + 100mL Elution buffer + 100mL Stringent buffer stock	1 kit
PP03-6C	6 pre-packed column + 2mL Lysis buffer buffer + 250mL System buffer + 100mL Elution buffer + 100mL Stringent buffer stock	1 kit
PP03-5E	3mL Resin + 2mL Lysis buffer buffer + 250mL System buffer + 100mL Elution buffer + 100mL Stringent buffer stock	1 kit

PhosPRO™ Phosphoprotein Purification Kit

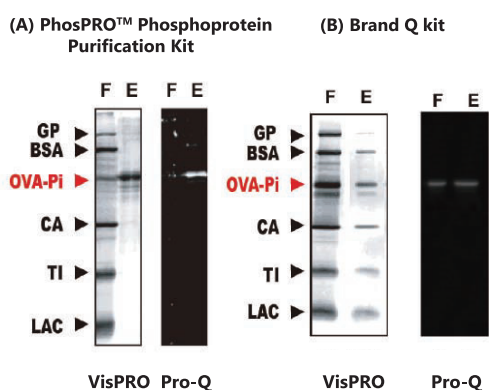
PhosPRO™ Phosphoprotein Purification Kit provides excellent purification result for phosphoproteins. When a standard protein mixture is used as the testing material, PhosPRO™ Phosphoprotein Purification Kit specifically enriches the phosphoprotein, ovalbumin, from other nonphosphoproteins. Almost none of the non-phosphoproteins are copurified in the elution fraction. With our proprietary chromatographic technology, PhosPRO™ Phosphoprotein Purification Kit delivers excellent efficacy of phosphoprotein purification, as compared with other commercial kit.



Advantages

- More flexible: PhosPRO™ provides stringent buffer stock for customer to optimize washing condition for their sample and to maximize target phosphoprotein purification result.
- More choices: PhosPRO™ series have 2 versions with 2 different packages for different purposes.

Performance



Purification of the phosphoprotein from the protein sample

Protein standard marker contains glycogen phosphorylase b (GP), bovine serum albumin (BSA), ovalbumin (OVA), carbonic anhydrase (CA), trypsin inhibitor (TI), and lactalbumin (LAC) were used for evaluation. Ovalbumin was the only phosphoprotein in the test material.

F: Flow through E: Eluent

VisPRO™ 5 Minute Protein Stain Kit and Pro-Q Diamond stain (Pro-Q, Invitrogen) were used for developing total proteins or phosphoproteins.

Ordering Information

PhosPRO™ Phosphoprotein Purification Kit

PP05-2C	2 pre-packed column + 2mL Lysis buffer buffer + 250mL System buffer + 100mL Elution buffer + 100mL Stringent buffer stock	1 kit
PP05-6C	6 pre-packed column + 2mL Lysis buffer buffer + 250mL System buffer + 100mL Elution buffer + 100mL Stringent buffer stock	1 kit
PP05-5E	3mL Resin + 2mL Lysis buffer buffer + 250mL System buffer + 100mL Elution buffer + 100mL Stringent buffer stock	1 kit



4

Proteomics

VisPRO™ Series
IEF Optimizer
BREEZE™ Lighting Box

Dual-Range™ BCA Protein Assay Kit

Dual-Range™ BCA Protein Assay Kit is the most used protein assay method. It based on bicinchoninic acid (BCA) for the colorimetric detection and quantitation of total protein in the 5–2,000 µg/mL concentration range. Like the Lowry method, the assay relies on the reduction of Cu²⁺ ions by protein. The Cu⁺ thus formed is detected by conversion into a violet-colored substance by reaction with bicinchoninate. Dual-Range™ BCA Protein Assay Kit is compatible with many detergents but not compatible with reducing agents, such as DTT, DTE, and 2-Mercaptoethanol etc.

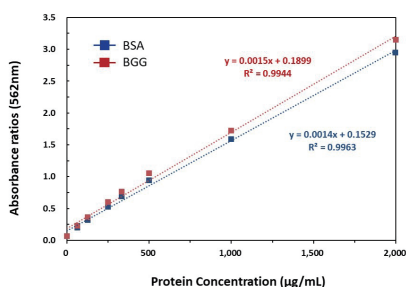


BC03-500

Advantages

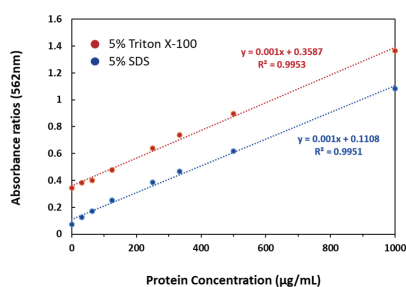
- Highly sensitive: detect down to 5 µg/mL with the enhanced protocol
- Broad linear range: high linearity in working range of BSA equals 20–2,000 µg/mL
- Compatible: unaffected by typical concentrations of most ionic and nonionic detergents

Performance



High linear working range

Standard curve of bovine serum albumin (BSA) and bovine gamma globulin (BGG) by using microplate procedure (37°C for 30mins).



Detergent compatible

Standard curve of BSA with 5% Triton X-100 or 8% SDS by using microplate procedure (37°C for 30mins).

Ordering Information

Dual-Range™ BCA Protein Assay Kit

BC03-500 500 mL Reagent A + 12 mL Reagent B + 10*1 mL BSA (2 mg/mL)

1 kit

VisPRO™ 5 Minutes Protein Stain Kit

The imidazole-zinc reverse stain, utilizing imidazole and zinc ions for protein visualization on electrophoretic gels, was originally introduced in the 1990s. This method is based on the selective precipitation of the imidazole-zinc complex in the gel, except in where proteins or other macromolecules are present. Similar to negative film, this method only stains the gel rather than the target proteins. The VisPRO™ 5 Minutes Protein Stain Kit is a modified version of the imidazole-zinc reverse stain and it is designed for convenience and superior performance.

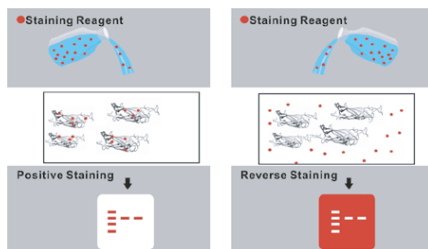


VP01-500

Advantages

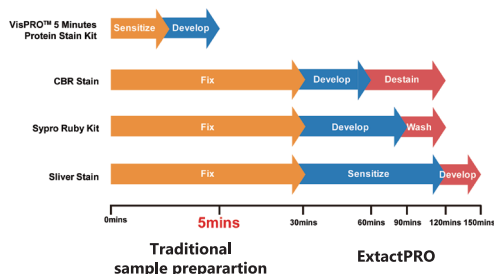
- Fast: finish the stain procedure in 5 minutes
- High sensitivity: detect protein level to 1 ng
- High compatibility: applicable with downstream proteomic analysis

Performance



Positive staining vs. Reverse staining

Most protein gel staining methods are based on the principles of positive staining. To obtain an ideal result, the dye molecules must be completely absorbed by target proteins, and that may require a prolonged incubation of many hours, even up to one day. Furthermore, a tedious de-staining procedure may be required to remove the undesirable staining from the background.



Comparison the staining time by using VisPRO™ 5 minutes Protein Stain Kit and other

Unlike conventional positive staining methods, reverse staining can be completed in a short time because the target of reverse staining is the gel rather than the proteins. Therefore, reverse staining methods allow researchers to obtain the results promptly.

Ordering Information

VisPRO™ 5 Minutes ProteinStain Kit

VP01-125	125mL solution 1 + 125mL solution 2	1 kit
VP01-500	500mL solution 1 + 500mL solution 2	1 kit
VP05-125	125mL 5x solution 1 + 125mL 5x solution 2	1 kit
VP05-500	500mL 5x solution 1 + 500mL 5x solution 2	1 kit
VP10-1L	125mL 10x solution 1 + 125mL 10x solution 2	1 kit

IEF Optimizer

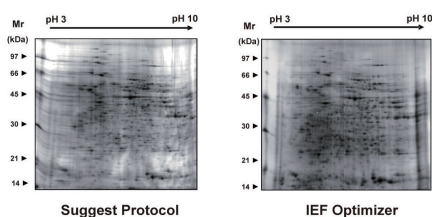
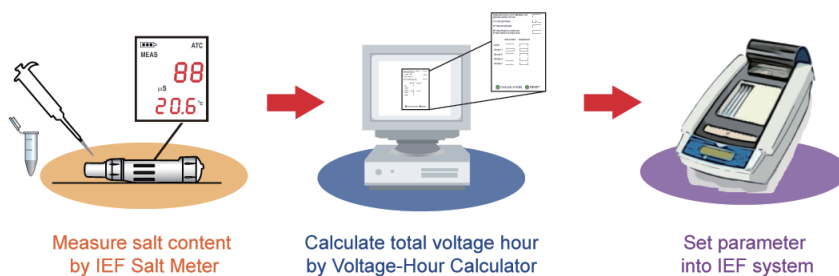
IEF Optimizer is a novel and convenient instrument which can measure the salt content of the two-dimensional electrophoresis (2-DE) samples. With the combination of IEF salt meter and the online accessible voltage-hour calculator, IEF Optimizer can provide you a suggested total voltage hour for IEF process to avoid underfocusing and overfocusing of proteins and to give you reproducible data with accuracy.



Advantages

- Provide the accurate salt content measurement of 2-DE samples and optimal IEF total voltage hour for 2-DE samples
- Increase the reproducibility of 2-DE result
- Reduce underfocusing and overfocusing of 2-DE experiments

Performance



Optimal parameter provided by IEF Optimizer shows better results than the suggested protocol

IEF Optimizer provides you the optimal parameters.
Sample: pig liver. 1-D electrophoresis is from pH 3-10. 2-DE using 12.5% SDS-PAGE. Results obtained according to the manufacturers' instruction handbook (left). Result obtained according to the IEF Optimizer parameter (right).

Ordering Information

IEF Optimizer

IOR01	IEF Salt Meter + Voltage-Hour Calculator (Online Software) registration card	1 kit
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BREEZE™ Lighting Box

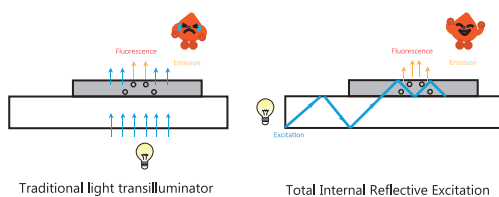
BREEZE™ Lighting Box is an economical and powerful fluorescence excitation instrument with non-laser excitation source for fluorescent signals detection. BREEZE™ Lighting Box can be used to visualize the fluorescent signals of the protein bands/spots with bare eyes without hazard caused. It is also designed to be compatible with any available imaging system for image capture.



Advantages

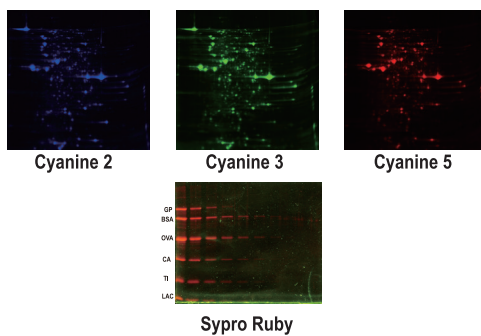
- Convenience: Multiple-excitation sources for broad range of fluorescent substances
- Safe: Non-laser excitation source for worry-free of physical hazard
- Compatible: Upgrade entry-level image capture system

Performance



Based on Total Internal Reflective Excitation (TIRE)

Principle of lighting by traditional excitation (traditional light transilluminator) and BREEZE Lighting Box (total internal reflective excitation).



Captured gel images of different fluorescent dyes with the use of BREEZE™ Lighting Box

BREEZE™ Lighting Box and the application on different type of fluorescent dyes (Cyanine 2, Cyanine 3, Cyanine 5 and Sypro Ruby).

Ordering Information

BREEZE™ Lighting Box

BRZ03	1 Excitation instrument + 3 Glass filters + 3 Filter spectacles	1 kit
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5

Buffer

General Buffers for Life Science

PBS Buffer, 10X

PBS10-1L	1 L of 10X Solution	pH 7.4
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10X PBS Buffer is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions which, when diluted to a 1X working concentration, contains 145 mM NaCl, 10 mM KH_2PO_4 .

PBS Buffer, 25X (liquid pack)

PBS200P	30 liquid packs, 1 pack for making 200 ml of 1X PBS Buffer	pH 7.4
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10X PBS Buffer is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions which, when diluted to a 1X working concentration, contains 145 mM NaCl, 10 mM KH_2PO_4 .

PBS Tween 20 Buffer, 10 X

PBST10-1L	1 L of 10X Solution	pH 7.4
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10X PBST Buffer is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions. When diluted to a 1X working concentration with ddH_2O , it contains 145mM NaCl, 10 mM KH_2PO_4 , 0.05% Tween-20.

PBS Tween 20 Buffer, 25X (liquid pack)

PBST200P	30 liquid packs, 1 pack for making 200 ml of 1X PBST Buffer	pH 7.4
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25X PBS Buffer is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions which, when diluted to a 1X working concentration with 200 ml of ddH_2O , contains 145 mM NaCl, 10 mM KH_2PO_4 .

TBS Buffer, 10X

TBS10-1L	1 L of 10X Solution	pH 7.4
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10X TBS buffer is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions which, when diluted to a 1X working concentration, contains 25mM Tris, 150mM NaCl.

TBS Buffer, 25X (liquid pack)

TBS200P	30 liquid packs, 1 pack for making 200 ml of 1X TBS Buffer	pH 7.4
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25X TBS Buffer is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions which, when diluted to a 1X working concentration with 200 ml of ddH_2O for each buffer pack, contains 25mM Tris, 150mM NaCl.

TBS Tween 20 Buffer, 10X

TBST10-1L	1 L of 10X Solution	pH 7.4
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10X TBS Tween 20 buffer is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions which, when diluted to a 1X working concentration, contains 25mM Tris, 150mM NaCl, 0.05% Tween-20.

TBS Tween 20 Buffer, 25X (liquid pack)

TBST200P	30 liquid packs, 1 pack for making 200 ml of 1X TBST Buffer	pH 7.4
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25X TBS Tween 20 buffer is a pH-adjusted blend of ultrapure-grade phosphate buffers and saline solutions which, when diluted to a 1X working concentration with 200 ml ddH_2O , contains 25mM Tris, 150mM NaCl, 0.05% Tween-20.

General Buffers for Life Science

SDS-PAGE Running Buffer, 10X

RB10-1L	1 L of 10X Solution	pH 8.3
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SDS-PAGE Running Buffer is used for general SDS-PAGE Gels running. When reconstituted to 1X working solution, it contains 25mM Tris, 192mM Glycine, 0.1% SDS.

SDS-PAGE Running Buffer, powder pack

RB500P	20 powder packs, 1 pack for making 500 ml of 1X SDS-PAGE Running Buffer	pH 8.3
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SDS-PAGE Running Buffer Powder is used for general SDS-PAGE Gels running. The powder is made to have long shelf life, smaller volume, high resolution and fast electrophoresis. When reconstituted to 1X working solution, it contains 25mM Tris, 192mM Glycine, 0.1% SDS.

Western Blot Transfer Buffer, 10X

WTB10-1L	1 L of 10X Solution	pH 8.3
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Western Blot Transfer Buffer is used for general wet or semi-dry western blot transfer procedure. When reconstituted to 1X working solution, it contains 25mM Tris, 192mM Glycine.

Western Blot Transfer Buffer, powder pack

WTB500P	20 powder packs, 1 pack for making 500 ml of 1X Western Blot Transfer Buffer	pH 8.3
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Western Blot Transfer Buffer is used for general wet or semi-dry western blot transfer procedure. The powder is made to have long shelf life, smaller volume, high resolution and fast transfer. When reconstituted to 1X working solution, it contains 25mM Tris, 192mM Glycine.



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