

MERCK

蛋白質實驗



新時代

更快速 更精準 更敏銳

Millipore®

Preparation, Separation,
Filtration & Testing Products

Sigma-Aldrich®

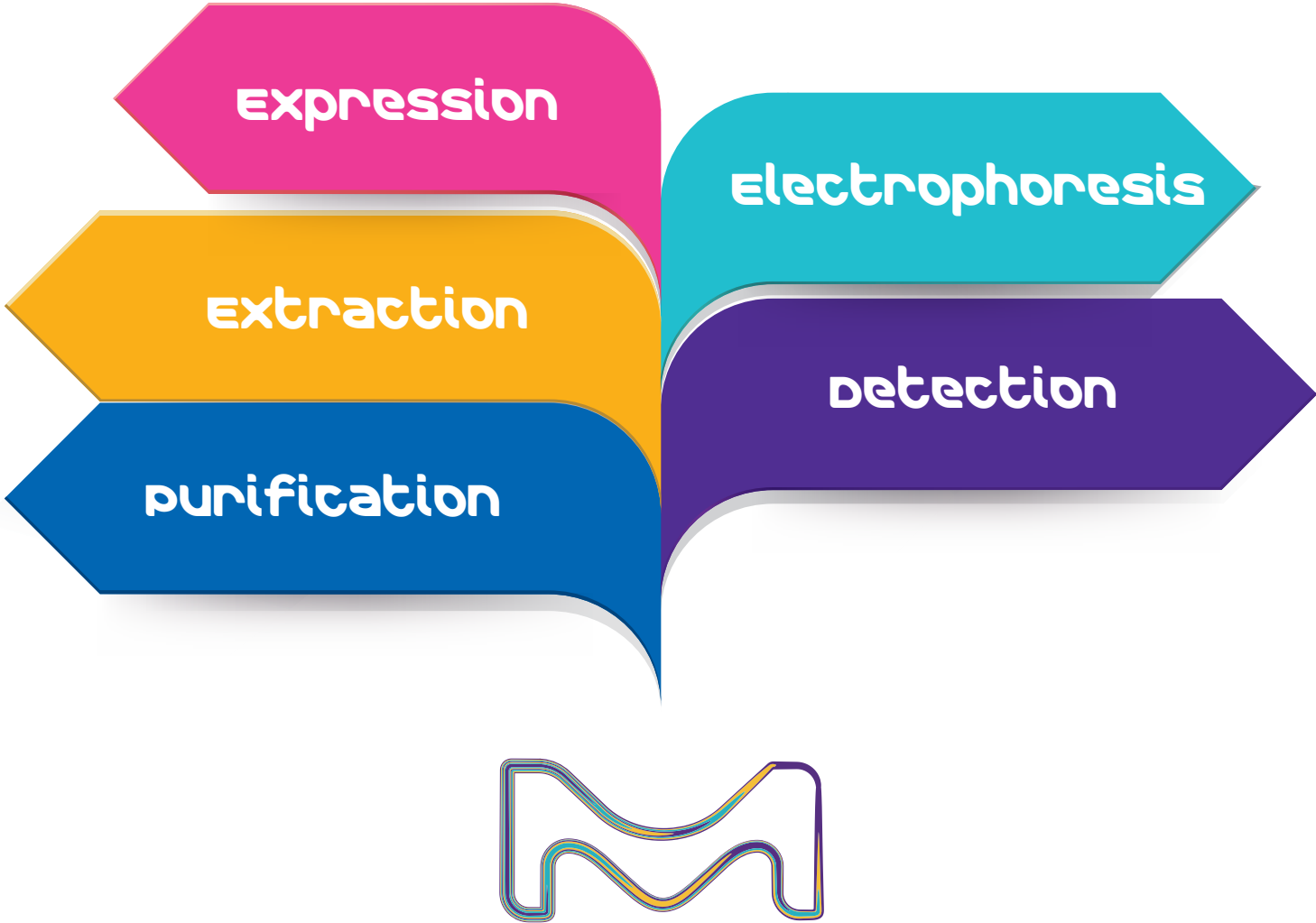
Lab & Production Materials



騰達行

0800-211-819

蛋白質實驗5階段



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重組蛋白表現



Polymerase Chain Reaction

KOD Hot Start DNA Polymerase (Cat. # 71086)

- 高產量，減少 PCR Cycle 至 25, 減少錯誤產生
- 高正確率，錯誤率比 Pfu 還低
- Genomic DNA templates 可放大至 12 kbp
- Plasmid 和 lambda DNA 可放大至 21 kbp
- 可成功放大 GC-rich(70%) 序列
- 消除 mispriming 和 primer-dimer 形成
- 方便於室溫操作 (Hot start), 與自動化系統相容
- 特製的 KOD Hot Start Buffer 可增進 PCR 表現
- 含免費的 2mM dNTP Mix

KOD Xtreme™ Hot Start DNA Polymerase (71975)

- 能有效放大 90% GC-content templates
- 正確率比 Tag 高十倍
- 可有效放大 24 kb 的 genomic targets
- 可有效放大 40 kb 的 phage/plasmid targets
- 能有效從 crude samples 中直接放大 DNA

Choose the Appropriate KOD

Enzyme	KOD DNA Polymerase	KOD Hot Start DNA Polymerase	KOD XL DNA Polymerase	KOD Xtreme Hot Start DNA Polymerase
PCR Product Size (kb)	<6	<21	<30	<40
Applications	Cloning, cDNA amplification	Cloning, cDNA amplification and 70% high GC targets	Crude samples, multiplex, incorporation of derivatized dNTPs	Crude samples, long targets, difficult and 90% GC-rich targets

- KOD-XL DNA polymerase amplification results in a mixture of blunt and 3'-dA products while other KOD DNA polymerases generate blunt end products.
- NovaTaq™ is also available for routine PCR.

HOT	KOD Hot Start DNA Polymerase	71086
	KOD Hot Start Master Mix	71842
	KOD Xtreme Hot Start DNA Polymerase	71975
HOT	Agarose PCR grade	2010
	6X DNA Loading Buffer	2100
	EtBr Solution	4410
	10X TAE Buffer	574797
	10X TBE Buffer	8830
	5X TBE Buffer	8800
	Sterile Purified Water	4.86505



Bacteria Protein Exp. Cloning- pET system

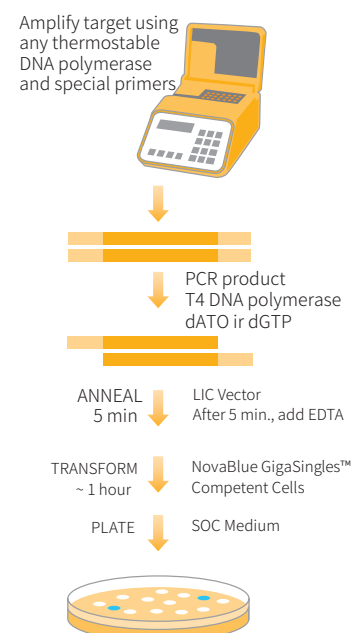
Trx•Tag、GST•Tag 和 Nus•Tag Fusion Tag 都是高度可溶的多肽，可以**增加目標蛋白溶解性**。這些載體中都設計了專一性蛋白酶識別位點，使融合標籤可以被完全去除。

GST 通常在 E.coli 蛋白表達中被用作 N- 端 Fusion Tag。儘管並非為此目的而特殊設計，GST • Tag 序列也可以增加融合蛋白的可溶性。pET-41a-c(+) 和 pET -42a-c(+) 載體編碼 GST • Tag 序列，可以分別被凝血酶、胰凝乳蛋白酶和 Xa 因數切割。

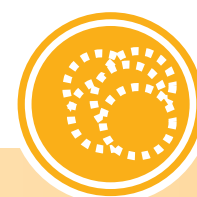
原來在 E.coli 中以不溶形式存在的蛋白當與 N- 端硫氧還蛋白 (Trx•Tag) 序列融合後，往往可增加溶解性 (LaVallie et al.,1993; Novy et al.,1995)。pET-32a-c(+) 中的 Trx • Tag 不僅可以增強一些蛋白的可溶性，也可以在 trxB 突變菌的胞質中催化二硫鍵的形成 (Stewart, 1998)。

pET-43.1a-c(+) 和 pET-44a-c(+) 載體整合了一個促溶解多肽 Nus • Tag 序列，在過表達時具有**最高可溶性的多肽** (Davis et al., 1999; Harrison, 2000)。測試中 4 種不同的 NusA 融合蛋白可溶性都超過了 85% (Harrison, 2000)。

不需連接反應的克隆方法 (LIC) LIC 是設計用於**不需限制性酶切點 & Ligation** clone PCR 產物的方法 (Aslanidis and de Jong, 1990; Haun et al., 1992)。用 LIC 法製備的 pET 載體有不互補的 12-15 碱基單鏈粘端，與目的插入片段上相應粘端互補。擴增目的插入片段的引物 5' 序列要與 LIC 載體互補。T4 DNA 聚合酶的 3' 5' 外切活性經短時間即可在插入片段上形成單鏈粘端。



Proteinase K, lyophilized	70663 / 1.24568
Proteinase K Solution, 600 mAU/mL	71049



Competent Cells

Origami(幫助蛋白質折疊): 許多蛋白要求形成穩定的雙硫鍵才能形成天然結構。**沒有雙硫鍵，蛋白可被降解或形成inclusion body**。大腸桿菌細胞質的氧化還原環境通常會造成雙硫鍵無法正確折疊。帶有谷胱甘肽還原酶 (gor) 突變和 / 或硫氧還蛋白還原酶 (trxB) 突變的菌株 (Origami) 都能增加細胞質中的二硫鍵形成 (Prinz et al., 1997; Aslund et al., 1999)。Origami 菌株帶有 trxB 和 gor 雙突變，比單具 trxB 突變的菌株更有可能促進二硫鍵的形成，使蛋白可溶性更好，活性更高 (Bessette et al., 1999)。研究還顯示，即使整體表達水準相似，Origami(DE3) 的活性蛋白要比其它菌株高 10 倍 (Prinz et al., 1997)。

Rosetta(解決codon bias): 在原核系統中表現真核蛋白常會遇到因為tRNA的不足，造成表現蛋白不完全 (過小)。Rosetta™菌株含有稀有Arg密碼子AGG和AGA，Ile 密碼子AUA，Leu 密碼子CUA，Pro 密碼子CCC 和Gly 密碼子GGA 的tRNA。Rosetta菌株相當適合用於表達那些含有E.coli 稀有密碼子基因的目的蛋白 (Novy et al., 2001) Rosetta 2提供7個 rare codons (AGA, AGG, AUA, CUA, GGA, CCC, and CGG)

下載 Protocol



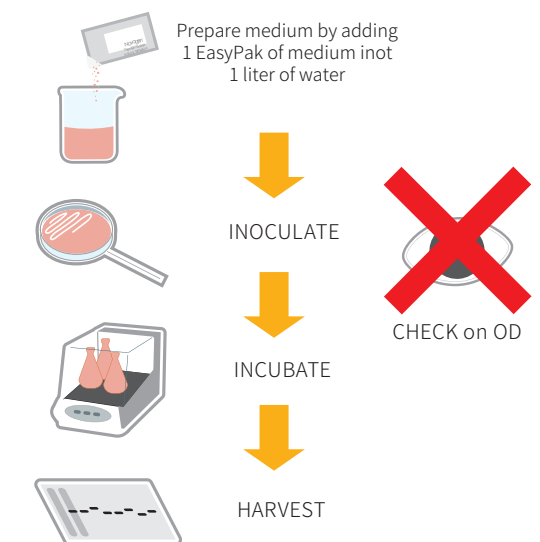
Rosetta™ 2 (DE3) Competent Cells	71397
Origami™ B(DE3) Competent Cells	70837
Chloramphenicol	220551
Kanamycin	420311
Hygromycin B	400052
Puromycin	540411
Ampicillin	171254



Media & Growth

Overnight Express 自動誘導系統用於在 E.coli 中表達蛋白，**無需監測細胞生長狀況**，也無需加入誘導物來誘導蛋白表達。這些獨特的培養基是根據 F.William Studier 在 Brookhaven 國家實驗室的研究成果優化設計的。

- NO 監測細胞生長、NO IPTG，**蛋白表達水準高**
- 與各種細胞培養容器相容，是高通量必需工具
- 方便的 EasyPak 包裝，顆粒狀易溶解，杜絕粉塵
- 提供 10kg 以上大包裝，大幅度降低發酵成本
- 提供可同時對蛋白進行標記的配方，用於 NMR



Overnight Express™ Instant LB Medium	71757-4
Overnight Express. Instant TB Medium	71491-4

IPTG

IPTG為蛋白質使用大腸桿菌表現蛋白最常用的誘導劑。其作用主要在誘發半乳糖的promoter.

- Dioxane free IPTG? (無毒 IPTG) Dioxane 為合成 IPTG 的副產物，許多 Papers 顯示，Dioxane 會抑制 E.coli 生長。固 Dioxane free IPTG，可以避免 E.coli 的生長抑制。

HOT	IPTG, Dioxane-Free, High Pur	420322
	X-Gal solution, 40mg/ml in DMSO	71077



Transfection



Mammalian Protein Expression

GeneJuice 轉染試劑以高轉染效率、使用方便、細胞毒性小為設計宗旨，在實際使用中獲得了非常理想的效果。GeneJuice 的**新型小分子多胺配方**克服了常見的陽離子轉染試劑帶來的細胞毒性作用，更適合做長效和暫態轉染。使用這種新的轉染試劑時**完全不需要更換細胞培養基**，操作比其它試劑明顯方便，也是使用者選擇 GeneJuice 的重要原因。

細胞毒性極低

- 細胞轉染後存活率高，細胞活性好
- 轉染後蛋白表達產量高

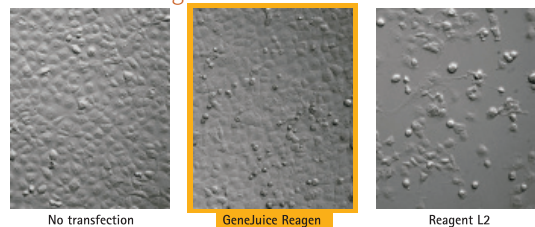
更經濟便宜

- 用量少，單次成本低至 6 元！
- 6 孔板每孔轉染僅需 2ul
- 適合高通量操作

使用更方便

- 適用於暫態及穩定轉染，轉染效率高
- 操作簡便，不需更換培養基
- 眾多文獻支援（80 種細胞轉染的引用文獻）
- 包裝多樣（0.3ml，1ml，10ml，5×1ml）

GeneJuice Reagent Is Less Cytotoxic Than Lipid-Based Transfection Reagents



GeneJuice Transfection Reagent
NanoJuice Transfection Kit
293-Free™ Transfection Reagent
ProteoJuice™ Protein Transfection
RiboJuice™ siRNA Transfection Reagent
NovaCHOice Transfection Kit

G418

要維持帶有細菌 *neo^r/kan^r* 基因真核表現載體的珍貴細胞株您需要最高品質，高選擇效率的 G418 >10,000 citations

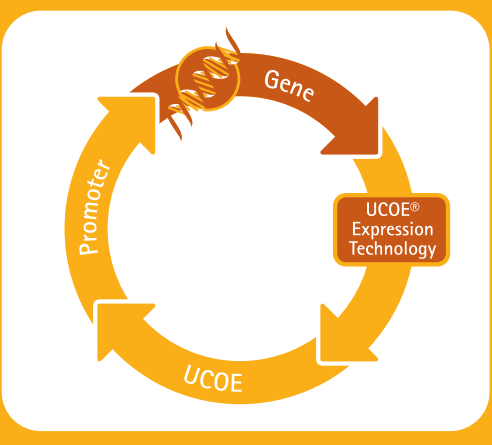
- 更高的純度 (Purity ≥ 98%)

G-418 Sulfate

345810

什麼是 UCOE® 技術？

普遍存在的染色質開放成分『Ubiquitous Chromatin Opening Element (UCOE)』因可影響染色質結構而能夠有效改善及提高穩定轉染細胞中的外源基因表現。UCOE® 是 DNA 的一個小片段，源於 Housekeeping genes 的調控區域；UCOE® 可有效防止 **gene silencing**，無論融入於染色質的任何位置，目標基因皆可持續穩定的高度表現；受其控制的基因克服「Position effect (位置效應)」的效果佳，因而可保持活躍的轉錄狀態，使目標蛋白能在宿主細胞中出現最高產量。



UCOE® Expression Vector, Mouse 3.2 kb, Puro 5.04865.0001
UCOE® Expression Vector, Mouse 3.2 kb, Hygro 5.04866.0001
UCOE® Expression Vector, Human, 4 kb, Puro 5.04867.0001

蛋白質萃取

When purifying proteins for functional or structural studies, the first step is to disrupt the cells or tissue sample and extract the relevant protein fraction. This step is critical because processing methods that require harsh mechanical, chemical, or enzymatic treatments can affect the target protein's integrity and activity, or otherwise expose it to degradative conditions.

Our complete range of reagents and enzymes for cell lysis and protein extraction provide you with an array of options so that you can put together the perfect extraction protocol for your particular cells and protein.

Protein Extraction Reagents Application Guide

Products by Cell Type	Starting Material		Applications			Comments
	Total Culture	Cell Pellet	1D PAGE	2D PAGE / IEF	Activity Assay	
E. coli						
BugBuster® Master Mix		■	■	■	■	Combines BugBuster® Protein Extraction Reagent with Benzonase® Nuclease and rLysozyme™ Solution. Convenient, all-in-one protein extraction reagent efficiently lyses bacteria and digests nucleic acids.
BugBuster® Protein Extraction Reagent		■	■	■	■	Efficient protein extraction from E. coli under non-denaturing conditions.
BugBuster® 10X Protein Extraction Reagent		■	■	■	■	A concentrated form of BugBuster® Protein Extraction Reagent. Ideal for extraction when a specific buffer is required for protein stability.
PopCulture® Reagent	■		■		■	Protein extraction from cells directly in the culture medium; no centrifugation required.
Yeast						
YeastBuster™ Protein Extraction Reagent		■	■		■	Efficient protein extraction from yeast under non-denaturing conditions from any volume of culture. Add 0.5 M THP Solution (included) and Benzonase® Nuclease for enhanced efficiency.
Insect						
CytoBuster™ Protein Extraction Reagent		■	■	■*	■	Gentle lysis of insect cells with retention of protein activity for assays and purification. Can use with monolayers or pellets derived from suspension cultures.
Insect PopCulture® Reagent	■		■		■	Lysis of insect cells directly in serum-free medium. Ideal for expression screening of many small samples.
Mammalian						
CytoBuster™ Protein Extraction Reagent		■	■	■*	■	Gentle lysis of mammalian cells with retention of protein activity for assays and purification. Can use with monolayers or pellets derived from suspension cultures.
ProteoExtract® Kits		■	■	■*	■	Extract protein fractions from different parts of the cell. A range of kits offering maximum flexibility.
Lysis and Extraction Enhancement						
Gram-negative bacteria (E. coli)						
rLysozyme™ Solution	■	■	■		■	Cleaves bond in peptidoglycan layer of E. coli cell wall.
Lysonase™ Bioprocessing Reagent	■	■	■		■	Convenient mixture of rLysozyme™ solution and Benzonase® Nuclease minimizes pipetting steps.
Gram-positive bacteria						
Chicken Egg White Lysozyme Solution	■	■	■		■	Cleaves bond in peptidoglycan layer of bacterial cell wall.
All cells						
Benzonase® Nuclease	■	■	■		■	Degrades all types of nucleic acids for more efficient protein extraction, faster chromatography, and reduced interference in assays.

1D PAGE — One-dimensional Polyacrylamide Gel Electrophoresis

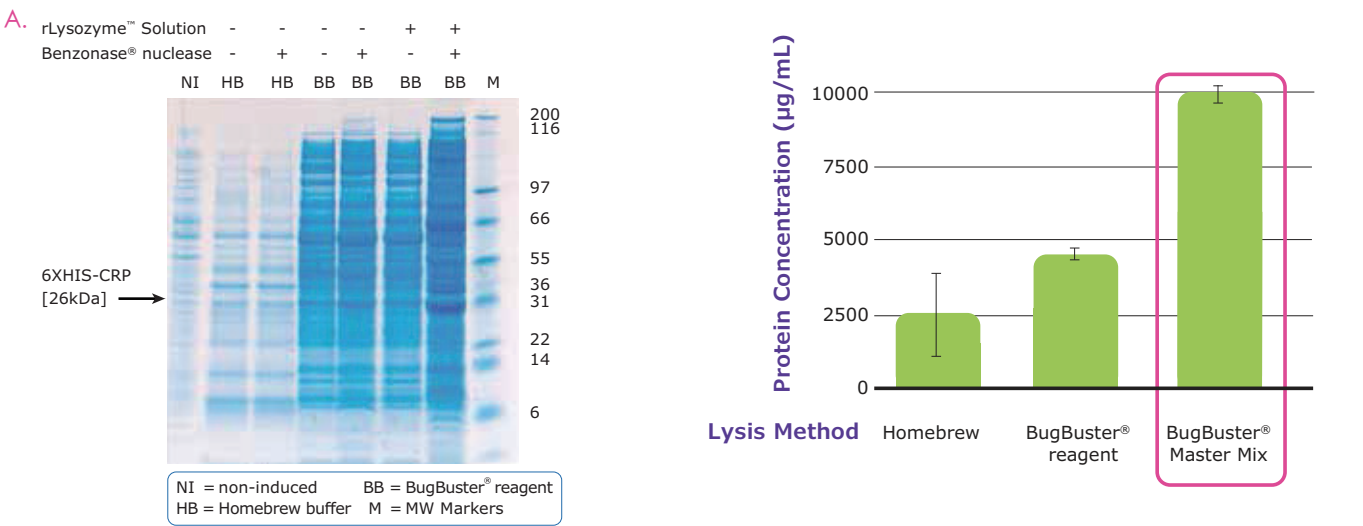
2D PAGE — Two-dimensional Polyacrylamide Gel Electrophoresis

IEF — Isoelectric Focusing

* — Salt must be removed before IEF

萃取細菌中重組蛋白 - 不再需要繁瑣的步驟，不須超音波震盪，並維持完整蛋白質結構

BugBuster® Protein Extraction Kits and Reagents



BugBuster® reagent is superior to “homebrew” lysis buffer and BugBuster® reagent with both Benzonase® nuclease and rLysozyme™ solution produced lysates with the highest 6XHIS-CRP yields. (A) E. coli lysates (5 µL of 1 mL total lysate) from various lysis protocols were fractionated and analyzed by SDS-PAGE. A band

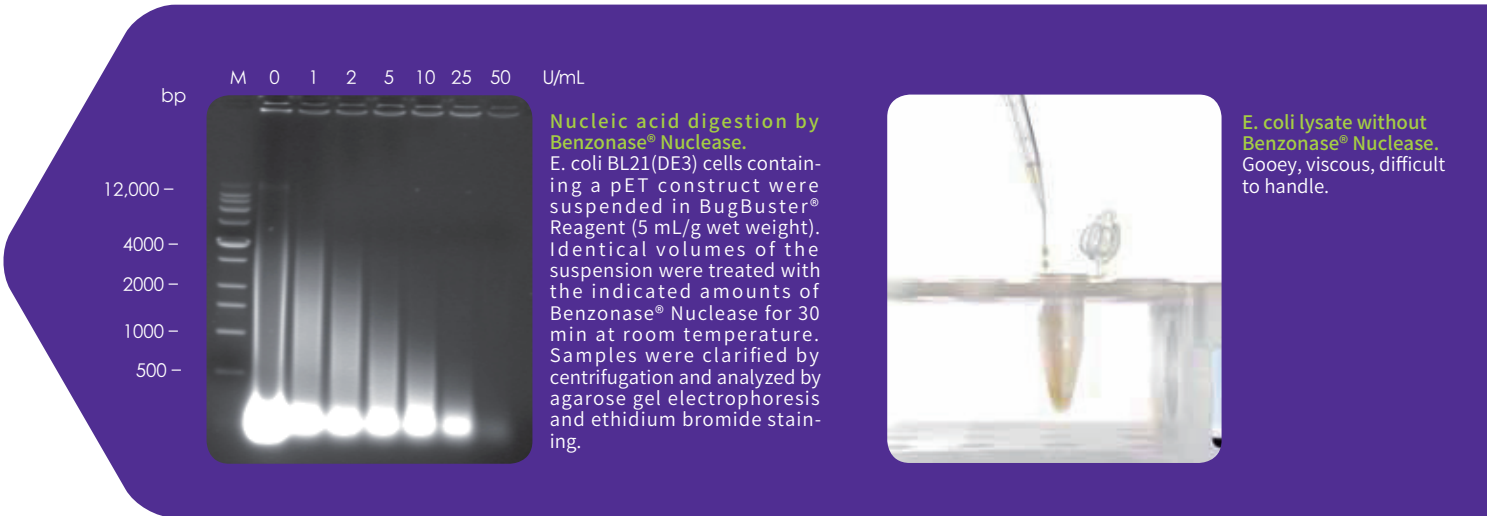
corresponding to 6XHIS-CRP is prominently visualized in the BB +/- lane. (B) Cleared cell lysates (2 µL of 1 mL total) were spotted on assay cards and quantified using the Direct Detect® spectrometer. In each case, bars represent the average of 3 independent samples.

我們提供一系列蛋白質提取試劑，溫和、高效，非機械地從細菌，酵母，植物，哺乳動物和昆蟲細胞中提取可溶性蛋白質。

唉呀！抽蛋白時核酸黏黏的怎麼辦？趕緊派出 Benzonase 把它吃乾淨

Benzonase® Nuclease
Effectively reduce viscosity and remove nucleic acids from protein solutions
Benzonase® Nuclease is a genetically engineered endonuclease from *Serratia marcescens*. It degrades all forms of DNA and RNA (single stranded, double stranded, linear and circular) while having no proteolytic activity. It is effective over a wide range of conditions and has an exceptionally high specific activity. Benzonase® nuclease is an excellent choice for viscosity reduction to shorten processing time and increase protein yields.

- Benzonase® Advantages**
- Compliant with FDA guidelines for nucleic acid contamination
 - Functional between pH 6 and 10, from 0 °C to 42 °C, for maximum versatility
 - Active in the presence of ionic and non-ionic detergents, reducing agents, PMSF (1 mM), EDTA (1 mM) and urea.
 - Available in ultrapure (> 99 % by SDS-PAGE) and pure (> 90 %) grades
 - Available in standard concentration (25 U/µL) and high concentration (HC, 250 U/µL).



CHEMICON®’s Nuclear Extraction Kit (Catalog No. 2900) provides a simple and convenient method for the isolation of cytoplasmic and nuclear samples from mammalian cell culture or tissue samples. The Nuclear Extraction Kit can be used in the preparation of purified proteins for use in Western blotting, Electrophoretic Mobility Shift Assays (EMSA), and in CHEMICON®’s Transcription Factor Assay product line.

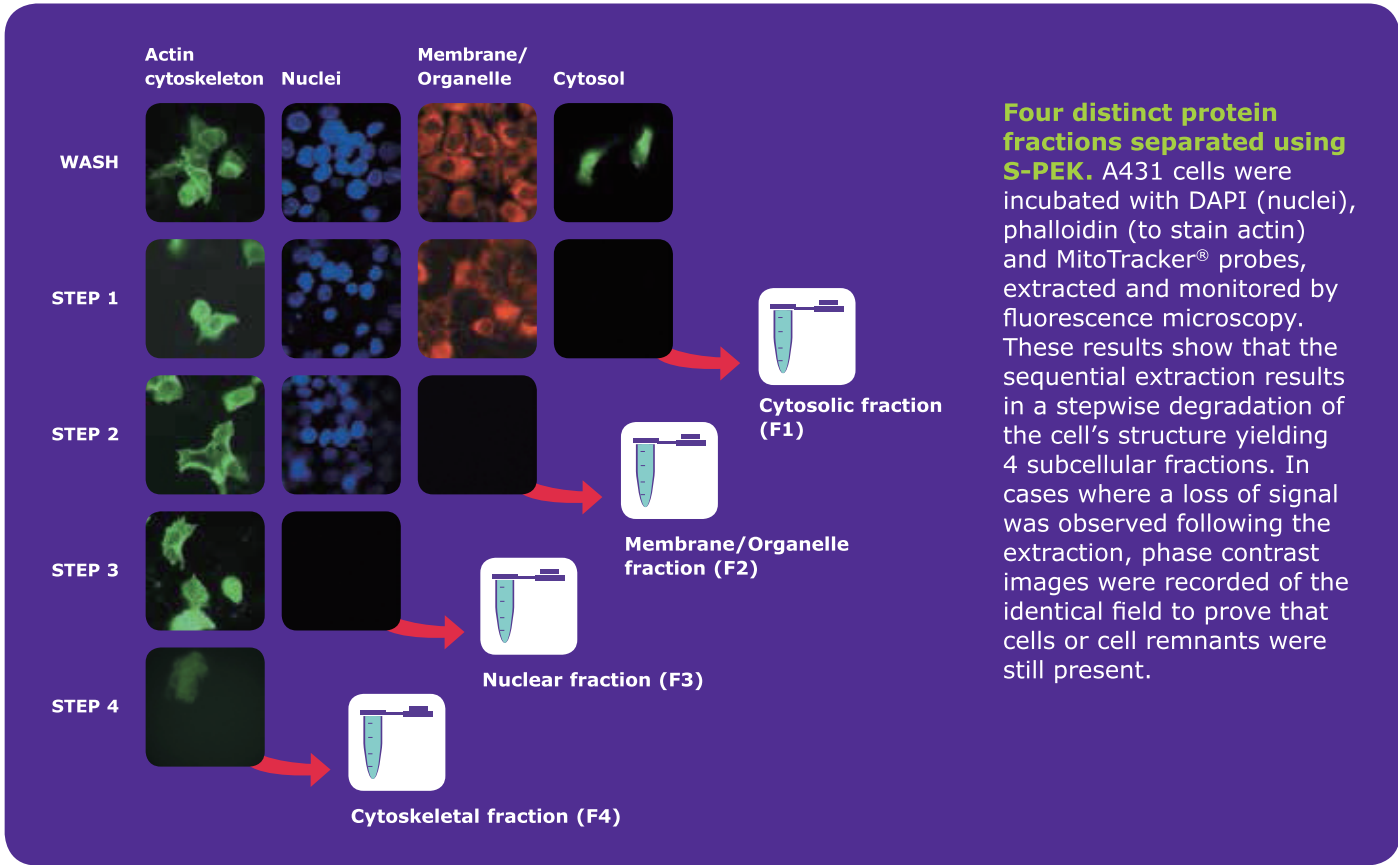
Ordering Information

Application	Description	Catalog No.
Bacteria	BugBuster® Protein Extraction Reagent	70584
	BugBuster® Master Mix	71456
	BugBuster® Plus Benzonase® Nuclease	70750
	BugBuster® Plus Lysonase™ Kit	71370
	BugBuster® 10X Protein Extraction Reagent	70921
	PopCulture® Reagent	71092
Mammalian	CytoBuster™ Protein Extraction Reagent	71009
	NucBuster™ Protein Extraction Reagent	71183
	PhosphoSafe™ Extraction Reagent	71296
Yeast	YeastBuster™ Protein Extraction Reagent	71186
Insect	Insect PopCulture® Reagent	71187

哺乳類細胞特殊萃取技術

蛋白質搭捷運在細胞裡跑來跑去，他要去哪裡？他要做什麼？

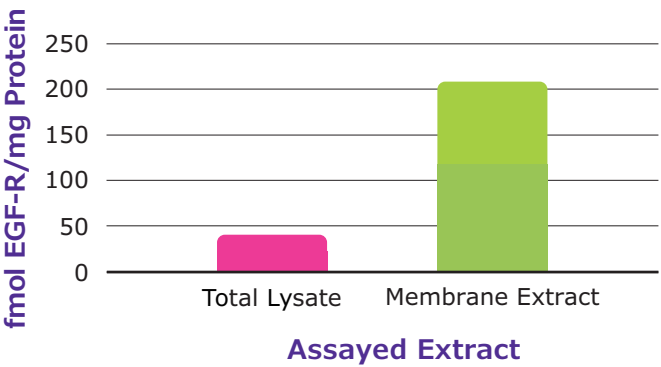
ProteoExtract® Subcellular Proteome Extraction Kit (S-PEK)
Reproducible extraction of subcellular proteomes from mammalian cells.
539790 - IKITCN



細胞膜上的蛋白就像人造衛星負責溝通各種內外訊息
取下它時要如何保持完整型態呢？

ProteoExtract® Native Membrane Protein Extraction Kit (M-PEK)
Isolation of native membrane proteins from mammalian cells and tissue.
Extract proteins associated with cellular membranes with M-PEK. Extremely mild extraction conditions yield a 3–5 fold enrichment of integral membrane and membrane-associated proteins. The simple, two-step procedure enables processing of multiple samples in parallel. Extraction from tissues requires isolation of viable cells before proceeding with the extraction protocol.

Applications for Extracted Membrane Proteins:



Notably increased enrichment of EGF receptor using M-PEK compared to total cell lysate. HEK293 cells were extracted with buffered 1 % Triton® X-100 surfactant to generate a total lysate or extracted with M-PEK to yield a membrane fraction. Equal volumes of these fractions were utilized to quantitate the concentration of EGF receptor in the samples using an EGF-R ELISA Kit. Protein concentrations were used to calculate the amount of EGF-R per mg protein in the total lysate and the membrane fraction. The measurements demonstrate a 4.5 fold enrichment of the EGF receptor in the M-PEK-extracted membrane fraction.

Ordering Information

Application	Description	Catalog No.
Organelle Fractionation	ProteoExtract® Subcellular Protein Extraction Kit	539790
	ProteoExtract® Complete Mammalian Protein Extraction Kit	539779
	ProteoExtract® Cytosol/Mitochondria Fractionation Kit	QIA88
	ProteoExtract® Native Cytoskeleton Enrichment Kit	17-10210
	ProteoExtract® Cytoskeleton Enrichment and Isolation Kit	17-10195
Membrane Proteins	ProteoExtract® Native Membrane Protein Extraction Kit	444810
	ProteoExtract® Transmembrane Protein Extraction Kit	71772
Mass Spec Peptide Enrichment	ProteoExtract® All-in-One Trypsin Digestion Kit	650212
	ProteoExtract® Glycopeptide Enrichment Kit	72103
	ProteoExtract® Phosphopeptide Enrichment TiO ₂ Kit	539722

特別推薦

Merck Millipore inhibitor COCKTAIL 好在哪？

- ☺ 溶好於DMSO 中，保護抑制劑活性，最後一滴依然保有最初效果，保護能力不衰退！
- ☺ Ready-to-use，需要多少取多少，快速簡單不浪費！

珍愛蛋白專案：

買任何 Merck 產品
皆可以加價購 1ml
Protease Inhibitor Cocktail III
(#539134, ready-to-use, 100X)

說好的磷酸化專案：

買任何 Merck 產品
皆可以加價購 1ml
Phosphatase Inhibitor Cocktail V
(#524629, ready-to-use, 50X)

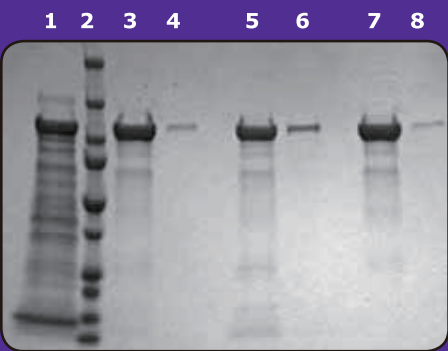
雙重保護專案：

Protease Inhibitor Cocktail III +
Phosphatase Inhibitor Cocktail V
各1ml 包裝
讓您的蛋白萬無一失！

重組蛋白的純化 - Tag resin 系列

His•Tag® Purification

Ni-NTA His•Bind® Resin has a binding capacity of over 10 mg of His-Tagged fusion protein per mL resin. The agarose matrix on the Ni-NTA His•Bind® Superflow™ Resin is structured with more crosslinking for enhanced bead rigidity, for exceptional compatibility with FPLC. Our IDA His•Bind® resins are offered uncharged to allow flexibility of choice in the metal ion (Nickel, Cobalt, Zinc, Iron, Copper, etc.). IDA supports can be recycled many times with no loss in performance.



Lane	Sample
1	Crude Extract
2	Markers
3	Ni-NTA Competitor Q Elution
4	Ni-NTA Competitor Q Strip
5	Ni-NTA Competitor G Elution
6	Ni-NTA Competitor G Strip
7	Ni-NTA His•Bind® Elution
8	Ni-NTA His•Bind® Strip

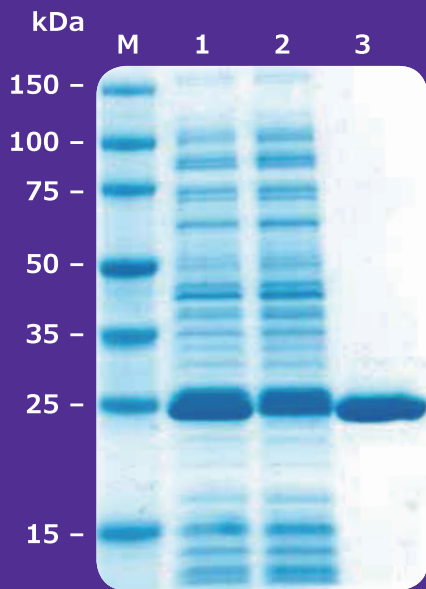
Ni-NTA His•Bind® performance vs. equivalent competitor resins Vector pET-28b (+) was used to express a His-Tag fusion protein of 119KDa in *E. coli* BL21 (DE3) cells, induced culture was processed with BugBuster® Master Mix, and protein extract was divided evenly to proceed to the His-Tag purification using Ni-NTA His•Bind®, Ni-NTA Competitor Q and Ni-NTA Competitor G resins. Ni-NTA His•Bind® resins show higher binding capacity and a better purification.

Ordering Information

Application	Description	Catalog No.
Ni-NTA His•Bind® Resin		
Small to medium scale	Ni-NTA His•Bind® Resin	70666
Gravity flow column	BugBuster® Ni-NTA His•Bind® Purification Kit	70751
Recommended for eukaryotic extracts	Ni-NTA Buffer Kit	70899
Ni-NTA His•Bind® Superflow™ Resin		
Small to production scale	Ni-NTA His•Bind® Superflow™ Resin	70691
FPLC or gravity flow column	Ni-NTA Buffer Kit	70899
Uncharged IDA His•Bind® Resin		
Uncharged (metal flexibility)	IDA His•Bind® Resin	69670
Reusability	His•Bind® Buffer Kit	69755
Small to medium scale	His•Bind® Purification Kit	70239
Gravity flow column or batch mode	BugBuster® His•Bind® Purification Kit	70793

GST•Tag™ Purification

The GST fusion system is based on the widely recognized affinity of glutathione-S-transferase (GST) fusion proteins for immobilized glutathione. Our GST Resin utilizes an 11-atom spacer arm to covalently attach reduced glutathione to the solid support via a sulfide linkage. The resin can be reused several times without loss of capacity, and the high degree of substitution of glutathione ensures exceptional binding capacity.

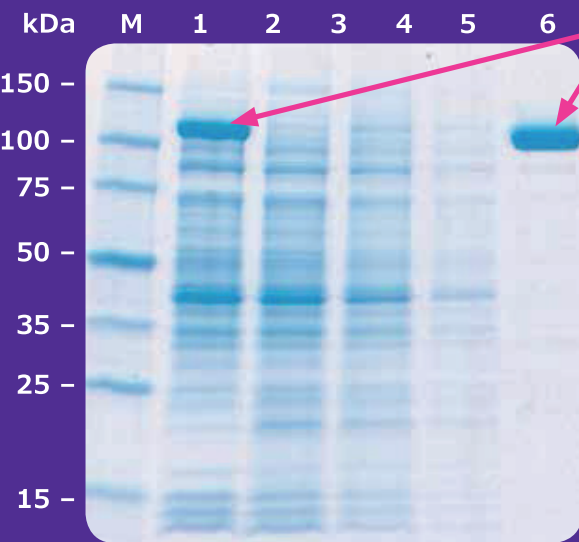


Lane	Sample
M	PerfectProtein™ markers 15–150 kDa
1	BugBuster® extract
2	Flow-through
3	Eluate

GST•TAG™ Purification
GST•Bind™ purification. A crude extract containing unfused GST was applied to a 2 mL GST•Bind™ Resin column. Total protein yield after purification was 8 mg/mL resin.

S•Tag™ Purification

The S•Tag™ fusion protein is a short 15-aa sequence that specifically binds with high affinity the 104-aa S-Protein ($K_D = 10^{-9}$ M, 1000 times stronger than the interaction between nickel and His•Tag® fusion protein). Fusion proteins can be easily purified by cleavage with site-specific proteases or in acidic buffers.



Lane	Sample
M	PerfectProtein™ markers 15–150 kDa
1	Crude extract
2	Flow-through
3	Wash 1
4	Wash 2
5	Eluate + Biotinylated Thrombin
6	Eluate after Biotinylated Thrombin removal

S•Tag™ affinity purification
S•Tag™ β-gal expressed from a pET construct was purified from a crude soluble fraction using S-protein Agarose under native conditions. Elution of the target protein from the agarose was performed by digestion with Biotinylated Thrombin, which was subsequently removed with Streptavidin Agarose. The fractions are indicated.

去除 Tag 真簡單

Restriction and Biotinylated Grade **Thrombin**

Highly efficient, specific cleavage of fusion proteins

Restriction Grade Thrombin is qualified to specifically cleave target proteins containing the recognition sequence LeuValProArgâGlySer. The preparation is functionally tested for activity with fusion proteins and is free of detectable contaminating proteases. Thrombin is supplied with 10X Thrombin Cleavage Buffer and a Cleavage Control Protein. Biotinylated Thrombin is identical in activity to Restriction Grade Thrombin, but has covalently attached biotin for easy removal of the enzyme from cleavage reactions using immobilized streptavidin. Our Thrombin Cleavage Capture Kit includes not only biotinylated thrombin and immobilized streptavidin, but also all required buffers and filters for complete, convenient recovery of cleaved protein.

HRV 3C Protease

Highly efficient, specific cleavage of fusion proteins

Recombinant type 14 3C protease from human rhinovirus (HRV 3C) is a highly purified, recombinant 6XHis-tagged enzyme, which recognizes the cleavage site LeuGluValLeuPheGlnâGlyPro. The small, 22 kDa size of the protease, with optimal activity at 4 °C, high specificity, and His-tag fusion make HRV 3C protease an ideal choice for rapid removal of fusion tags.

Strep · Tag® II Purification

The Strep · Tag® fusion protein II is an 8 amino acid sequence that binds to the biotin pocket of Streptavidin with 100 times higher binding capacity.

T7 · Tag® Purification

Purification is antibody-based. Covalently coupled to agarose beads, the T7 · Tag® monoclonal antibody captures the T7 · Tag® epitope — a sequence of 11

Streptavidin Agarose

Cross-linked agarose is covalently coupled with pure streptavidin under controlled conditions. The stable linkage to the resin minimizes leaching of the streptavidin while maintaining full binding activity.

Ordering Information

Description	Catalog No.
Restriction-Grade Thrombin	69671
Biotinylated Thrombin	69672
Thrombin Cleavage Capture Kit	69022
Restriction Grade Factor Xa	69036
Factor Xa Cleavage Capture Kit	69037
Recombinant Enterokinase	69066
Enterokinase Cleavage Capture Kit	69067
HRV 3C Protease	71493
Tag•off™ High Activity rEK	71537
Tag•off™ rEK Cleavage Capture Kit	71540

Ordering Information

Description	Catalog No.
GST•Tag™ Purification	
GST•Bind™ Resin	70541
GST•Bind™ Buffer Kit	70534
BugBuster® GST•Bind™ Purification Kit	70794
S-Tag Purification	
S-protein Agarose	69704
S•Tag™ Thrombin Purification Kit	69232
S•Tag™ rEK Purification Kit	69065
Strep•Tag® II Purification	
Strep-Tactin® Superflow Agarose	71592
Strep-Tactin® Buffer Kit	71613
Strep-Tactin® SpinPrep Kit	71608
D-Desthiobiotin	71610
T7•Tag® Purification	
T7•Tag® Affinity Purification Kit	69025
T7•Tag® Antibody Agarose	69026

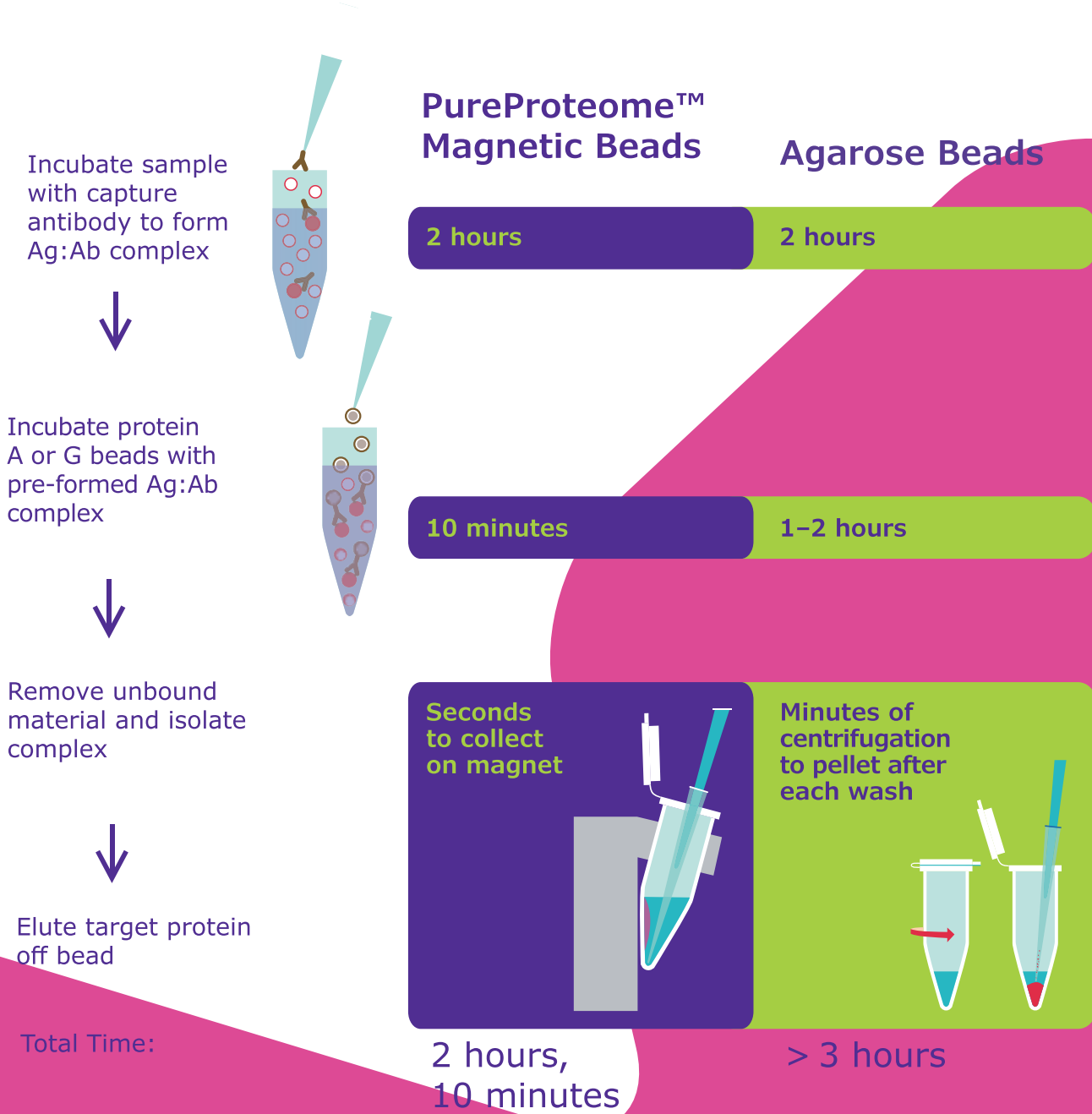
	Size	Catalog No.
Streptavidin Agarose	5 mL	69023-3
	10 mL	16-126

微量蛋白的純化 - IP 技術

PureProteome™ 磁珠系列

High speed immunoprecipitation with magnetic beads compared to agarose. In parallel indirect immunoprecipitations, PureProteome™ magnetic beads offered a 50 % reduction in incubation time while yielding results equivalent to agarose beads.

磁珠設計最大表面積來增加結合能力
室溫10min即可完成珠子抓取動作
讓 background 降到最低



Ordering Information

Application	Description	Catalog No.
IP, Antibody Purification, F(ab) Purification	PureProteome™ Protein A Magnetic Beads	LSKMAGA10
	PureProteome™ Protein G Magnetic Beads	LSKMAGG10
	PureProteome™ Protein A/G Mix Magnetic Beads	LSKMAGAG10
	PureProteome™ Kappa Ig-Binder Magnetic Beads*	LSKMAGKP02
	PureProteome™ Lambda Ig-Binder Magnetic Beads*	LSKMAGLM02
Biotinylated Molecule Purification	PureProteome™ Streptavidin Magnetic Beads	LSKMAGT10
His•Tag® Tagged Protein Purification	PureProteome™ Nickel Magnetic Beads	LSKMAGH10
Custom Labelled (Flexibility to Bind Ligand of Choice)	PureProteome™ NHS FlexiBind Magnetic Beads	LSKMAGN04
	PureProteome™ Carboxy FlexiBind Magnetic Beads**	LSKMAG1CBX10
Magnetic Stands	PureProteome™ Magnetic Stand, 8-well	LSKMAGS08
	PureProteome™ Magnetic Stand, 15 mL	LSKMAGS15

*Human only. **Available in 0.3, 1.0 and 2.5 µm.

20-400 強力傾斜式磁座 加購價 5000 元

可以把廢液去除的乾乾淨淨

可以把不溶顆粒雜質一起去除

磁珠在管子側面被吸的緊緊的，不被汙染，零損失！

IP-05 BSA blocking proteinA/G agarose beads

怎麼 wash 都還是有高 background 嗎？

快試試 BSA block beads!



Magna Grip™ Rack contains 8 holes suitable for 1.5-2.0 ml tubes or spin columns. May also be used with either 15 ml or alternately, 0.5 ml tubes, simply by standing the rack on either side.

Designed for immunoprecipitation applications. This product is blocked with BSA to reduce non-specific binding and cannot be used for purification.

Depletion kit 幫您撥開巨量蛋白的層層面紗讓您成功偵測稀有蛋白

ProteoExtract® Agarose Columns

Human serum and plasma samples are rich sources of proteomic information, reflecting processes regulating normal or diseased states. Today’s ultra-sensitive analytical methods, such as two dimensional (2D) gel electrophoresis and mass spectrometry, can detect minute changes in expression profiles — but ultrasensitive approaches typically require the removal of highly abundant proteins (HAP) and moderately abundant proteins (MAP).

We offer a range of kits and resins for depleting high-abundance proteins (HAP) from serum or plasma samples. Choose from the PureProteome™ magnetic bead kits and resins or the ProteoExtract® agarose columns. First, identify the species of your serum/plasma source — the following tables summarize the different solutions for your needs.

Ordering Information

Description	Format	Species	Proteins Depleted	Catalog No.
ProteoExtract® Albumin/IgG Depletion Kit	Agarose columns	Human, rabbit, rat, mouse, pig and bovine	Albumin and IgG > 80 %	122642
ProteoExtract® Albumin Depletion Kit			Albumin > 80 %	122640

Application	Description	Catalog No.
Depletion/Enrichment	PureProteome™ Albumin Magnetic Beads	LSKMAGL10
	PureProteome™ Albumin/IgG Depletion Kit	LSKMAGD12
	PureProteome™ Human Albumin/Immunoglobulin Depletion Kit*	LSKMAGHDKIT

*Human only.

ProteoPrep® Immunoaffinity Albumin & IgG Depletion Kit

The ProteoPrep® Immunoaffinity medium in pre-packed spin columns is a mixture of two-beaded media containing recombinantly expressed, small single-chain antibody ligands, providing low non-specific binding and high capacity. This kit is also effective in depleting albumin and IgG from mouse and guinea pig serum.

The ProteoPrep® Blue Albumin & IgG Depletion Kit is designed to specifically remove albumin and IgG from 25 samples of human serum (25 µL to 100 µL) in preparation for two-dimensional electrophoresis (2DE). Albumin-depleted serum samples generated by this kit are in urea rather than salt-based buffers with little dilution, eliminating the need to precipitate the sample prior to performing 2DE.

Ordering Information

Description	Format	Proteins Depleted	Catalog No.
ProteoPrep® Immunoaffinity Albumin & IgG Depletion Kit	Spin Column	Albumin > 95 %, IgG > 85 %	PROTIA
ProteoPrep® Blue Albumin & IgG Depletion Kit		Albumin > 85 %, IgG > 70 %	PROTBA

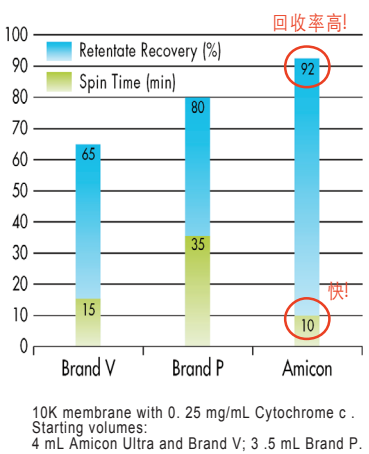
蛋白質純化濃縮的專家 ~ AMicon ultra

Fast - 離心時間短 + 高回收率，加速實驗流程

Highest Recovery Rate - 低濃度樣品也能維持高回收率

堅持 RC 膜
堅持高回收

raw material 濃縮與 Protein Fractionation, 不用擔心樣品流失



Amicon Ultra-4 Centrifugal Filter

Protein (Concentration)	NMWL*	Retentate Recovery (%) by Brand			
		V 6 mL	PG	P 7 mL	Amicon Ultra-4
Cytochrome C (0.025 mg/mL)	5,000	13	—	—	96
	9,000	—	—	56	—
	10,000	0	9	—	97
BSA (0.1 mg/mL)	20,000	—	—	44	—
	30,000	76	89	—	96
	50,000	0	—	—	79
IgG (0.1 mg/mL)	100,000	78	76	—	96

Protein (Concentration)	NMWL	Dilute Protein Recovery (%) by Brand			
		V 6 mL	P 7 mL	Amicon Ultra-4	
BSA (100 µg/mL)	30,000	76	80	96	
BSA (10 µg/mL)	30,000	51	66	93	
BSA (1 µg/mL)	30,000	16	67	88	
BSA (0.14 µg/mL)	30,000	6	44	87	

*Nominal Molecular Weight Limit or membrane cut-off



Real Physical Dead Stop Volume -

離心再久也不用擔心樣品
離心離到乾 (0.5 ml 亦可invert spin)

濃縮後的樣品體積差異小，方便不同
管樣品後續實驗的濃度計算及體積調整



Heat Sealed Membrane -

避免殘膠污染樣品
獨一體成型設計
無滲漏疑慮，不需擔心污染問題

更多種應用，請上網查詢：
www.millipore.com/FastEasy

NEW online Amicon® Ultra selector tool

Start your search

只要簡單回答幾個問題
就能快速幫您找到適合您實驗的
Amicon Ultra 系列產品
還可以直接下載實驗操作手冊喔！

1. What are you concentrating?
2. What is the source of your sample?
3. What is the molecular weight of your protein?
4. What is your starting volume?
5. What is your desired final volume?

Amicon Ultra Selector Tool

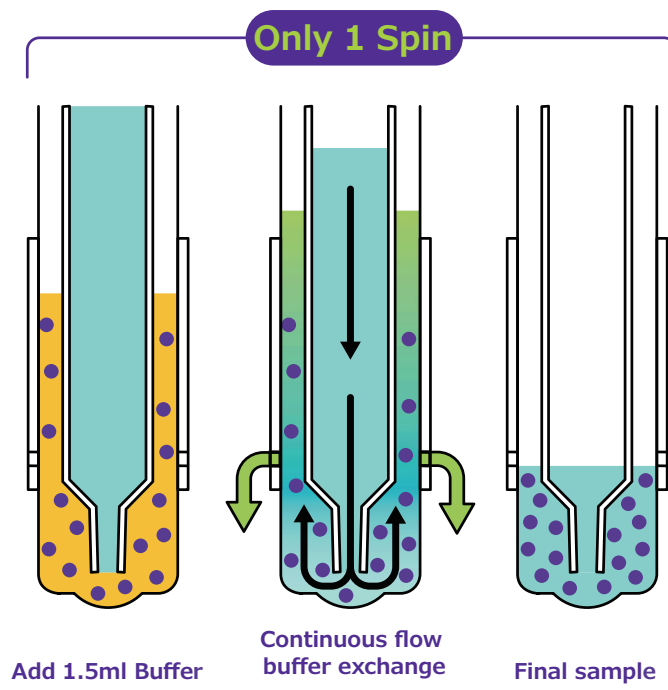
FAST AND EASY CONCENTRATION

What are you concentrating?

- ☐ DNA
- ☒ Protein or other molecules of known weight in kilodaltons (kDa)
- ☐ Mammalian cells
- ☐ Bacterial cells
- ☐ Virus
- ☐ Other molecules/particles of known size in nanometers

High Quality Amicon Ultra 來自全密閉自動化生產線 (網上導覽)

AMicon-pro 置換 buffer、去鹽、濃縮 一步到位



Ordering Information

To choose the appropriate Amicon® Pro device, determine the nominal molecular weight cut-off (NMWCO) for your protein of interest and your desired affinity purification scheme.

Amicon® Pro purification system — No Reagents Included	NMWCO				
	3,000	10,000	30,000	50,000	100,000
Amicon® Pro Purification System 12/pk	ACS500312	ACS501012	ACS503012	ACS505012	ACS510012
Amicon® Pro Purification System 24/pk	ACS500324	ACS501024	ACS503024	ACS505024	ACS510024
Amicon® Pro Purification System 24/pk without Amicon® Ultra 0.5 mL filter			ACS500024		

大體積濃縮交給 AMicon stirred cell

Amicon® Stirred Cells

50 mL to 400 mL concentration

Amicon® stirred cells provide high flow rates with solutions up to 10 % macrosolute concentration and are capable of rapid concentration, or salt removal followed by concentration in the same unit. For protein concentration, gas pressure is applied directly to ultrafiltration cell. Solutes above the membrane’s nominal molecular weight cut-off (NMWCO) are retained in cell, while water and solutes below the cut-off pass into the filtrate and out of cell.

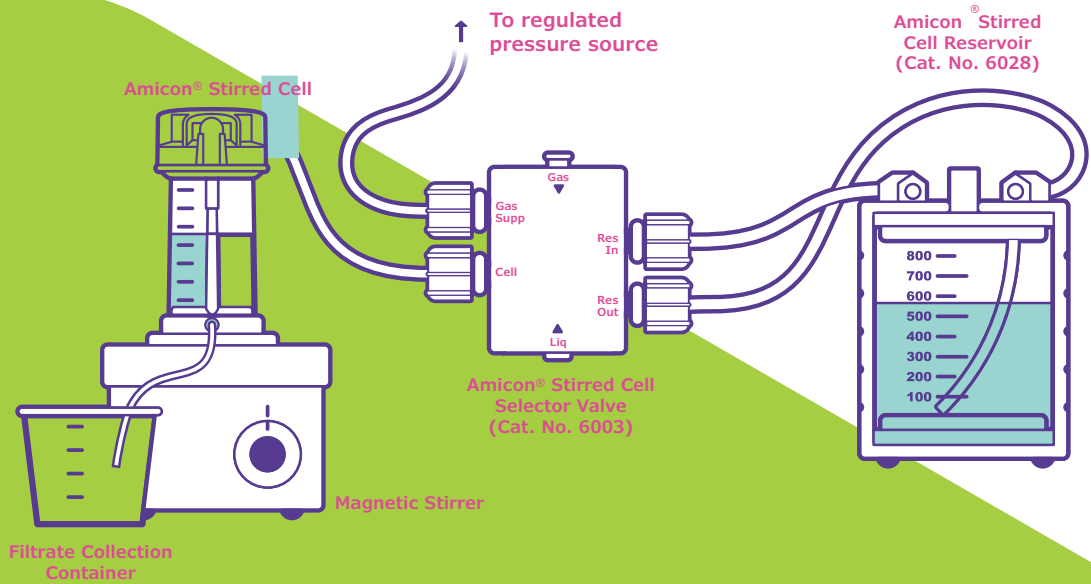
Advantages

- Gentle magnetic stirring minimizes concentration polarization and shear denaturation.
- All stirred cells can be autoclaved.
- Three different sizes to handle volumes from 50 mL to 400 mL
- High flow rates with solutions up to 10 % macrosolute concentration



Available in three sizes

Max. Working Volume	Catalog No.
50 mL	UFSC05001
200 mL	UFSC20001
400 mL	UFSC40001



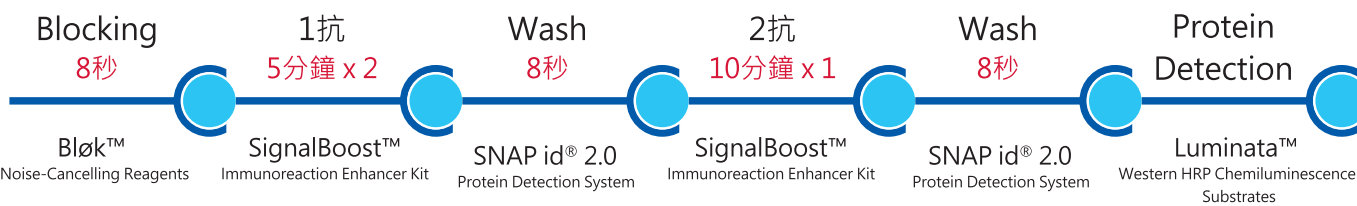
Amicon® Stirred Cell setup for large volume concentration and continuous diafiltration using selector valve and reservoir accessories.

MERCK 分生等級試劑
邀您一起 omnipur

	Description	Cat. No.	Size
Organics & Inorganics	OmniPur® Agarose	2120	100 g
	OmniPur® Agarose	2125	500 g
	OmniPur® Agarose, Low Melting	2070	100 g
	OmniPur® Glycerol	4750	1 l
	OmniPur® Glycerol	4760	4 l
	OmniPur® Phenylmethyl Sulfonyl Fluoride	7110	5 g
	OmniPur® Phenylmethyl Sulfonyl Fluoride	7130	250 g
	OmniPur® Protein Molecular Weight Marker	7331	500 uL
	OmniPur® TEMED	8920	25 ml
Buffers	OmniPur® Glycine	4810	500 g
	OmniPur® Glycine	4840	5 kg
	OmniPur® TRIS	9210	500 g
	OmniPur® TRIS	9230	5 kg
	OmniPur® TRIS Hydrochloride	9310	500 g
	OmniPur® TRIS Hydrochloride	9350	5 kg
Detergents	OmniPur® Sodium Dodecyl Sulfate, SDS	7910	500 g
	OmniPur® Tween® 20 (Polyoxyethylene (20) Monolaurate)	9480	1 l
	OmniPur® Tween® 20 (Polyoxyethylene (20) Monolaurate)	9485	4 l
	OmniPur® Tween® 80 (Polyoxyethylene (20) Monooleate)	9490	1 l
	OmniPur® Tween® 80 (Polyoxyethylene (20) Monooleate)	9495	4 l
	OmniPur® Triton® X-100 Surfactant	9400	100 ml
	OmniPur® Triton® X-100 Surfactant	9440	4 l
	OmniPur® Triton® X-100 Surfactant	9460	20 l
Salts, Acids & Bases	OmniPur® Sodium Chloride	7710	500 g
	OmniPur® Sodium Chloride	7760	5 kg
	OmniPur® Magnesium Chloride, Hexahydrate	5980	500 g
	OmniPur® Ammonium Persulfate	2300	25 g
Buffers	OmniPur® 10X PBS Liquid Concentrate	6505	4 l
	OmniPur® 10X PBS Liquid Concentrate	6504	20 l
	OmniPur® 10X PBS Liquid Concentrate	6507	4 l
	OmniPur® 10X PBS, Premixed Powder	6508	1 l
	OmniPur® PBS Tablets	6501	200 ea
	OmniPur® 10X TBE Buffer	8820	4 l
	OmniPur® 10X TBE Buffer	8830	20 l
	OmniPur® 10X TBE Buffer	8840	200 l
	OmniPur® 10X TG Buffer	9000	4 l
	OmniPur® 10X TG-SDS Buffer	9015	4 l
Chelating Agents	OmniPur® EDTA	4005	500 g
	OmniPur® EDTA	4008	5 kg
	OmniPur® EDTA, Disodium Salt, Dihydrate	4010	250 g
Dyes and Stains	OmniPur® 6X Loading Buffer	2100	5ml
	OmniPur® Bromophenol Blue, Sodium Salt	2830	25 g
	OmniPur® Ethidium Bromide	4410	10ml
Water	Water, WFI Quality, Sterile Purified Water	4.86505.0500	500 ml
	Water, WFI Quality, Sterile Purified Water	4.86505.1000	1 l
	Water, WFI Quality, Sterile Purified Water	4.86505.5000	5 l

western blotting 勝利方程式

重新思考您的西方墨點法



IMMOBILON western HRP substrate

- 檢測靈敏度範圍廣，保證更好的資料重現性
- 即用預混式設計，不需要配製，方便好用
- 在同一靈敏度級別中具有更好的性價比

signalboost™ reagent

- 增加了抗體抗原親和力，進而增強信號強度
- 抗體用量的10%即可獲得同樣強度的信號

bløk® noise cancelling reagents

- 化學性block- 提供高效穩定的封閉效果
- 不干擾蛋白磷酸化檢測

IMMOBILON®-P PVDF Membrane

- 超過五萬兩千篇文獻的推薦
- 最早應用於Western的PVDF

reblot™ plus western blot recycling

- 操作簡便，滿足快速多次抗體檢測要求
- 無酸配方，減少蛋白降解（如Edman降解）風險

SNAP i.d.® 2.0 protein detection system

- 節省時間，增加抗體binding機率
- blocking 8秒、washing 8秒、binding 8秒
- 抗體可回收

MERCK

western blotting 不再傷透腦筋

SNAP i.d.® Starter Package

Components	Package Catalogue No.
SNAP i.d.® 2.0 Protein Detection System – please specify which size	STARTMINI
Immobilon®-P Membrane, 0.45 µm, 26.5 cm x 3.75 m roll	STARTMIDI
SNAP i.d.® 2.0 Blot Holders, 100 units/pk	STARTMM
Bløk®-CH Noise Cancelling Reagent	
Luminata™ Classico Western HRP Substrate, 100 mL	
Reblot™ Plus Strong Antibody Stripping Solution, 10x, 50 mL	

SNAP i.d.® Basic Package

Components	Package Catalogue No.
SNAP i.d.® 2.0 Protein Detection System – please specify which size	BASICMINI
Immobilon®-P Membrane, 26.5 cm x 3.75 m roll	BASICMIDI
SNAP i.d.® 2.0 Blot Holders, 100 units/pk	BASICMM

Western Blotting Package

Components	Package Catalogue No.
Immobilon®-P Membrane, 26.5 cm x 3.75 m roll	WBPRO
Bløk® Noise Cancelling Reagent	
Luminata™ Classico Western HRP Substrate, 100 mL	
Reblot™ Plus Strong Antibody Stripping Solution, 10x, 50 mL	

Fluorescent Blotting Package

Components	Package Catalogue No.
Immobilon®-FL PVDF Membrane, 0.45 µm, 26.5 cm x 3.75 m roll	WBPROFL
Bløk® Noise Cancelling Reagent	

Luminata™ Starter Package

Components	Package Catalogue No.
Luminata™ Classico Western HRP Substrate, 100 mL	WBLUM0100
Luminata™ Crescendo Western HRP Substrate, 100 mL	
Luminata™ Forte Western HRP Substrate, 100 mL	



MERCK Life science
0800-068-222
FB.COM/MMTaiwan

Immobilon®轉印膜
 應用文獻已經超過52,000篇

膜主要依靠疏水作用（PVDF）或靜電吸附（纖維素膜）與生物分子發生相互作用。膜孔增加了結合表面積同時也對被結合蛋白的大小有所限制。截至 2011 年初 Immobilon® 轉印膜的應用文獻已經超過 52,000 篇。這個久負盛名的高品質轉印膜系列，包括最早應用于 Western 轉印的標準 PVDF-Immobilon®-P，根據特殊應用需要新開發的小分子蛋白專用的 Immobilon®-PSQ 以及螢光檢測專用的 Immobilon®-FL，成為 Western 印跡操作的首選轉印膜系列產品。

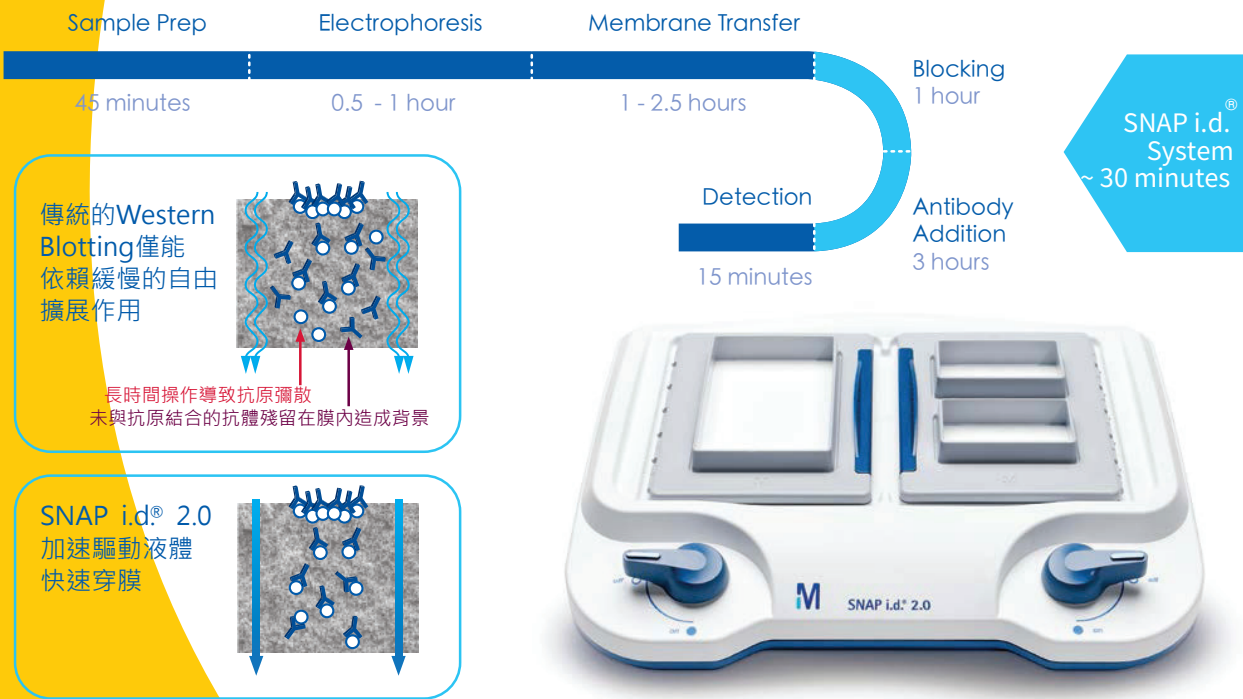
- 有 0.45um，0.2um 及螢光檢測專用膜等，滿足不同應用要求
- 蛋白吸附能力強，結合穩固，信號更強
- 延展性好，方便長時間存放，不像純硝化纖維那樣易翹易脆裂
- PVDF 膜更方便做多輪雜交
- 根據不同蛋白選擇最適孔徑的膜，從而獲得最佳的蛋白結合效果



SNAP i.d.® 2.0
 Protein Detection System for Western Blotting

傳統的 Western-Blotting 中，各種反應主要靠液體的擴散，SNAP i.d.® 2.0 加速器利用真空抽吸促使液體穿膜而過，大大減少了反應時間、提高了操作效率。這種創新的技術使抗原 - 抗體結合更快

- 非特異性結合或吸附降低，漂洗更充分，而 Western Blotting 的整體效果更加優化。
- 超快速：30 分鐘，完成 WB 實驗。
- 超省錢：簡單回收 Ab，節省成本。
- 超方便：最多同時操作 4 片 membrane
- 超強訊：減少 Overblocking，使靈敏度提高並可有效洗去未結合之抗體，降低背景值
- 多選擇：可放置不同大小的轉漬膜，含 (4.5 x 8.4 cm),(7.5 x 8.4 cm)&(8.5 x 13.5 cm)。
- 室溫下即可進行整個實驗亦可將 Holder 移至 4 度反應，增加靈敏度
- 適用各家廠牌之 membrane 及 substrate



Luminata™ Western chemiluminescent HRP substrates
 穩定的顯色效果

化學發光 HRP 底物（辣根過氧化物酶底物，也常被稱為 ECL 試劑）是目前 Western blot 檢測中最為靈敏的試劑。默克密理博傳統的 Immobilon 系列 HRP 底物擁有穩定的顯色效果，一直為用戶所推崇。新上市的 Luminata™系 列 HRP 底物包括三種預混型 HRP 底物，方便易用，具有一些相較於同類產品更有優勢的特點。

- 檢測靈敏度範圍廣，保證更好的資料重現性
- 即用預混式設計，不需要配製，方便好用
- 在同一靈敏度級別中具有更好的性價比
- 還有噴壺式設計，方便好用



	Luminata™ Classico	Luminata™ Crescendo	Luminata™ Forte
Unique Feature	Premixed	Premixed	Premixed
Best used for	Blots where the primary antibody is incubated for ~1 hr	Blot where the primary antibody is incubated > 2 hrs	Blots with overnight primary antibody incubation, or detection of PTM** proteins
Detection Range	~6 pg	~1–3 pg	~400 fg
Signal Duration	1 hr	3 hr	3 hr
Stock Solution Stability	1 yr at 4 °C	1 yr at 4 °C	1 yr at room temperature

**PTM - Post-translationally modified.

SignalBoost™ immunoreaction enhancer
 增加抗體抗原的專一親和力，增強信號強度

SignalBoost™作為抗體稀釋液在一抗、二抗孵育時增加了抗體的專一親和力，增強了信號強度，改善了 Western blot 資料結果。

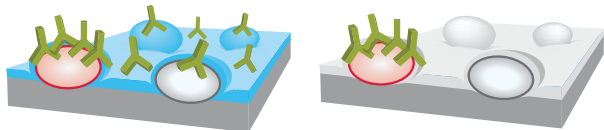
- 增強免疫印跡、斑點印跡及 ELISA 信號
- 節省寶貴的抗體。最少僅需原始抗體用量的 10%
- 與化學發光、螢光、顯色等各種檢測方法相容



Bløk® Noise cancelling reagents
 高效穩定的封閉效果- 您Blocking的最佳選擇

傳統的牛奶 / 蛋白類封閉劑會形成較厚的、粘粘的蛋白層，導致與抗體發生非特異性相互作用，增加了背景。而且，牛奶含的磷酸化蛋白會干擾檢測，不適合蛋白磷酸化檢測。Bløk® 提供高效穩定的封閉效果，支援您的 WB 獲得最佳資料。

- CH 為通用型，FL 用於螢光檢測，PO 用於磷酸化蛋白檢測
- 顯著降低背景，改善蛋白檢測效果
- 無需為考馬斯亮藍染色額外跑一次電泳
- 性質穩定，室溫可存放 2 年以上
- 即用型設計，使用更方便



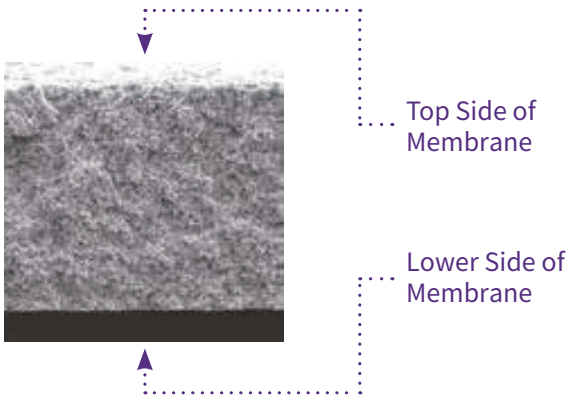
IMMOBILON PVDF

How do Immobilon® membranes work?

Membranes bind biomolecules through hydrophobic (polyvinylidene fluoride (PVDF) or electrostatic (cellulose-based membranes) interactions. Membrane pores increase the surface binding area while restricting sizes of bound proteins.

Key Benefits

- Stronger protein signals due to high adsorption & retention of protein in the membrane
- Prolonged shelf life due to higher tensile strength
- Easier stripping & reprobing with PVDF membranes
- A variety of pore sizes provides optimal protein retention



Membranes are 3-dimensional structures full of microscopic pores (Scanning electron microscope image of a crosssection of Immobilon®-P Membrane, Magnification: 500x).

Membrane comparison table

	PVDF Membranes				Nitrocellulose Membranes			
Manufacturer	Millipore® Brand				GE Healthcare Life Sciences			
Membrane Name	Immobilon®-E	Immobilon®-P	Immobilon®-FL	Immobilon®-P ⁹⁰	Amersham® Protran	Amersham® Protran premium	Amersham® Protran	Amersham® Protran premium
Chemistry	PVDF	PVDF	PVDF	PVDF	Nitrocellulose	Nitrocellulose	Nitrocellulose	Nitrocellulose
Pore Size	0.45 µm	0.45 µm	0.45 µm	0.2 µm	0.45 µm	0.45 µm	0.2 µm	0.2 µm
Detection methods	Chemiluminescence, Colorimetric, Fluorescence	Chemiluminescence, Colorimetric	Chemiluminescence, Colorimetric, Fluorescence (including near-infrared)	Chemiluminescence, Colorimetric, Fluorescence	Chemiluminescence, Colorimetric	Chemiluminescence, Colorimetric, Fluorescence	Chemiluminescence, Colorimetric	Chemiluminescence, Colorimetric, Fluorescence
Goat IgG	225-293 µg/cm²	294 µg/cm²	300 µg/cm²	448 µg/cm²	115-125 µg/cm²	162-180 µg/cm²	150-176 µg/cm²	173-203 µg/cm²
BSA	N/A	215 µg/cm²	205 µg/cm²	340 µg/cm²	N/A	N/A	N/A	N/A
Insulin	N/A	160 µg/cm²	155 µg/cm²	262 µg/cm²	N/A	N/A	N/A	N/A
Applications	Western blots	Western blots, dot blots			Western, Southern and Northern blots, dot blots			
	The durability and high protein retention of Immobilon PVDF make these membranes the preferred option for sequential detection of multiple targets via antibody stripping and reprobing.							
Selection Criteria	• Target protein expressed over a broad dynamic range • Wide range of molecular weights		• Target protein <20 kDa • Very low abundance target protein • Low affinity antibody		• High-abundance target protein • Wide range of molecular weights		• High-abundance target proteins • Target protein <20 kDa	

Binding capacity

您西方墨點用的PVDF

該戒酒了

喝後不轉漬 轉漬不喝酒

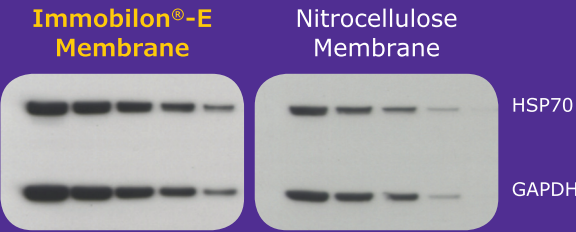
No more Alcohol pre-wet
Alcohol = methanol or ethanol or isopropanol



NEW Immobilon®-E membrane for high sensitivity immunodetection

- 1985年，Millipore研發了Immobilon-P，首次將PVDF應用到 Western Blotting技術中，不但帶給客戶容易操作的膜材及保存更久的結果，更讓實驗結果靈敏度提升到另一境界。不過，這樣的操作有一個缺點，那就是PVDF需要Alcohol來pre-wet，直到至今……
- 2018年，Millipore研發了Immobilon-E，不僅維持PVDF給 WesternBlotting技術帶來的方便創新，更消滅了那美中不足，從此，PVDF不需再用Alcohol pre-wet.

您還在用NC嗎？試試最新不需Alcohol pre-wet的Immobilon-E 顛覆您對PVDF的想像，簡簡單單提升訊號



樣品試用申請中

訂購資訊：
IEVH00005 | Immobilon-E Membrane, PVDF, 0.45 µm, 26.5 cm x 1.875 m roll

高貴不貴，歡迎您來電洽詢：
0800-068-222

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樣本試用申請中

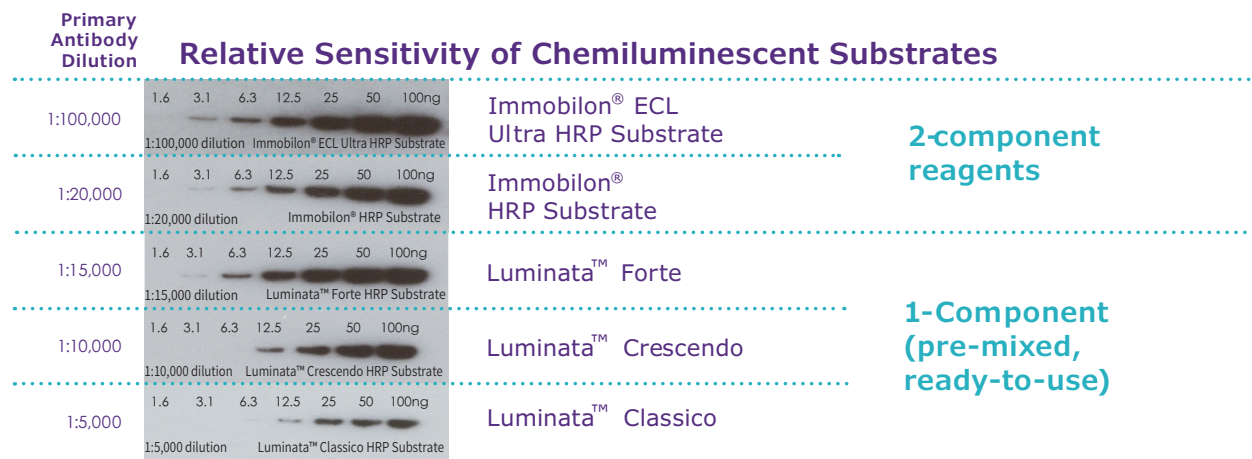
超乎您想像的 靈敏度

Immobilon® Reagent 幫助改善您免疫檢測的結果

Substrate :

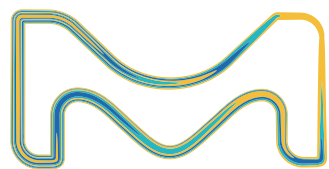
Immobilon ECL Ultra Western Chemiluminescent HRP Substrate 是默克全新推出的高靈敏度Substrate.

- 高敏度：Merck免疫偵測產品中靈敏度最高的substrate，針對horseradish peroxidase (HRP)偵測。不論是在傳統底片或是數位照相系統，都可以偵測到femtogram範圍的蛋白質。
- 高持續：訊號可以延續許久，可以重複曝光多片膜，不再需要匆匆忙忙。
- 高相容：適合PVDF 和 nitrocellulose 膜，而且適用於一般的buffers 和 blocking reagents



Catalogue Number	Pack Size
WBULS0100	100 mL (2 x 50 mL)
WBULS0500	500 mL (2 x 250 mL)

Improve your signal in your next Western blot.
sigma-aldrich.com/westernblot



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MERCK

面對珍貴檢體不用怕，ReBlot 幫您完成抗體複選題

ReBlot™ Plus Western blot recycling kit

ReBlot™ Plus: 擁有超過 ~2,900 份文獻

What is ReBlot™ Plus?

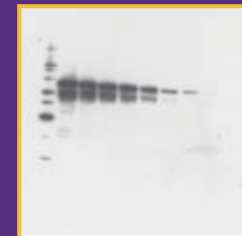
- Re-Blot™ Plus 溫和型 Stripping Solution - Provides good results on both nitrocellulose and PVDF membranes.
- Re-Blot™ Plus 強力型 Stripping Solution - Performs when membranes with high signal are to be stripped, or use when Re- Blot™ Plus Mild treatment is not sufficient.

Key Benefits

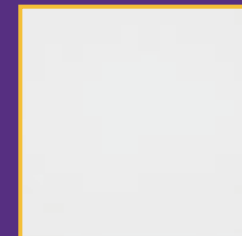
- β-Mercaptoethanol-free to avoid pungent odors
- Room temperature stripping in just 15 minutes
- Fast reuse of blots for multiple antibody probings
- Non-acidic, for reduced risk of protein degradation (such as in Edman degradation)

SNAP i.d.® 2.0 System

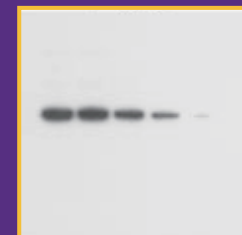
HSP70



Stripped Blot



GAPDH



ReBlot™ efficiently strips blots to allow for fast reprobing with different antibodies.

Two-fold dilutions of A431 lysate were resolved by SDS-PAGE then transferred onto Immobilon® -P. The blot was initially probed with HSP70 (1:8,000, Cat. No. H5147) (top) using the SNAP i.d.® system. Following stripping using ReBlot™ Plus Strong for 15 minutes (middle), the blot was reprobed with anti-GAPDH (1:8,000, Cat. No. MAB374) (bottom).

ReBlot's™ ability to efficiently strip the blot led to a clean GAPDH blot, even though both primary antibodies share the same anti-mouse secondary antibody.

Immobilon[®] NOW



Measurement
marks on the lid.
No ruler needed.



Immobilon
NOW Dispenser[®]