

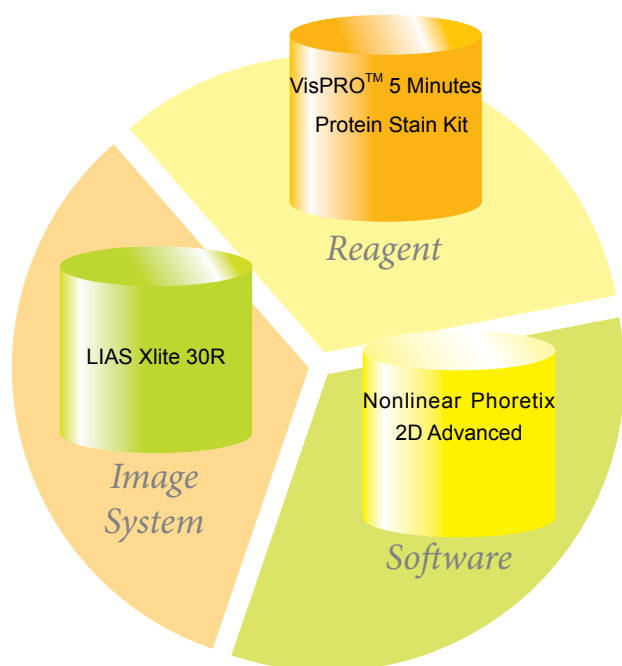
# **Prostain**

**5 Minutes Protein Stain System**

***Are you still using CBR stain, Silver stain or Sypro Ruby?***



# What is ProStain System



Avegene ProStain System provides a more efficient and easier way to stain and analyze your protein gels in nanogram scale. Not like conventional methods, such as silver stain, Coomassie Brilliant blue stain, as well as Sypro Ruby stain, taking a few hours to complete the experiment, ProStain system enables researchers to get high quality PAGE results within just 5 minutes.

ProStain system will definitely be the best solution to fulfill your requirements in protein gel analysis. You don't need to learn any complicated procedures or purchase any expensive instrument. It comes out the results with higher sensitivity and linear range than Silver Stain and CBB. Only two steps for gel staining (VisPRO) and one bottom for image scanning (Proimager), it's time to explore brand new protein world!

## Feature:

- ▲ Ultra Fast: <10 min operation time
- ▲ High Sensitivity: More sensitive than silver staining
- ▲ Mass Compatible: No bound component and ideal for mass spectrometry
- ▲ Reversible: Easy destaining and can be further stained by other staining methods

# ProStain System Consists of Three Main Parts

## VisPRO™ 5 Minutes Protein Stain Kit

VisPRO™ 5 Minutes Protein Stain Kit based on the principle of Zinc stain, a negative staining method, is highly stable, non-toxic, and can be stored at room temperature for at least two years. The formation of Zinc-imidazole complex on polyacrylamide turns the gel to white and makes the protein portions remain transparent (no reactions with proteins). The proteins can be conducted for the following sequencing or MASS analysis without any destaining procedures.

## LIAS Xlite 30R

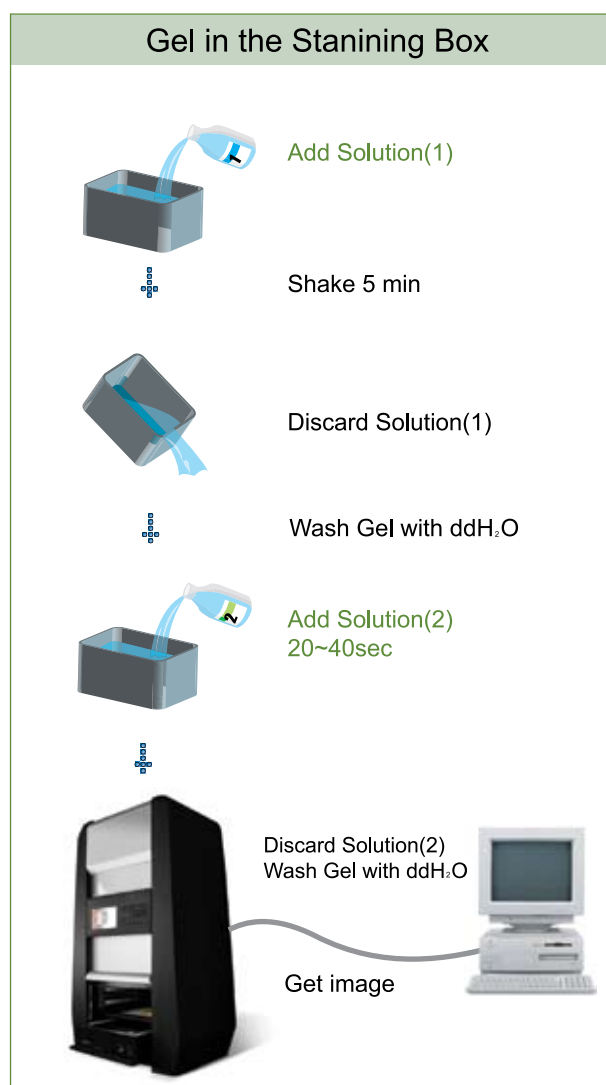
Xlite is one of Luminant Image Analysis System (LIAS) designed especially for laboratory use and it enables you to get bio images for qualitative or quantitative analysis. Standalone design can save laboratory space. Large color LCD and film control panels can be easily handled during the image handling. Auto-save images in TIFF, BMP or RAW formats at Secure Digital Card helps researchers easily to analysis data with other computers and software. X-Lite will be your first choice with its complete accessories, fashionable look, and pragmatic functions.

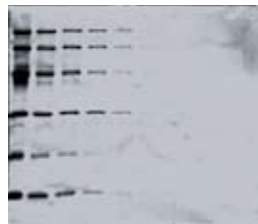
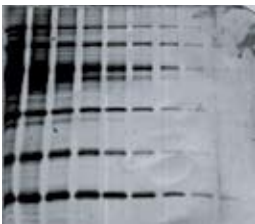
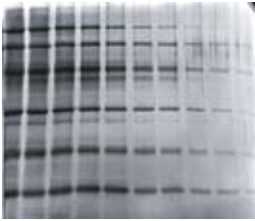
## Nonlinear Phoretix 2D Advanced

Nonlinear Dynamics Ltd, a leading provider of bioinformatics solutions, announces the release in early September of version 6 of Phoretix™ 2D Advanced, designed and developed in response to the ever changing needs of scientists analysing 2D electrophoresis gels.

Researchers can have confidence in their 2D analyses using this in-depth and flexible software with its comprehensive editing facilities, easy-to-use interface and wide range of powerful visualisation tools. Version 6 includes several major new features offering even further benefits. For example, scientists are now able to find significant expression changes across a series of gels very quickly and easily using the new expression table, which shows fold changes between values on the current gel compared across all other gels.

## Quick Staining Protocol





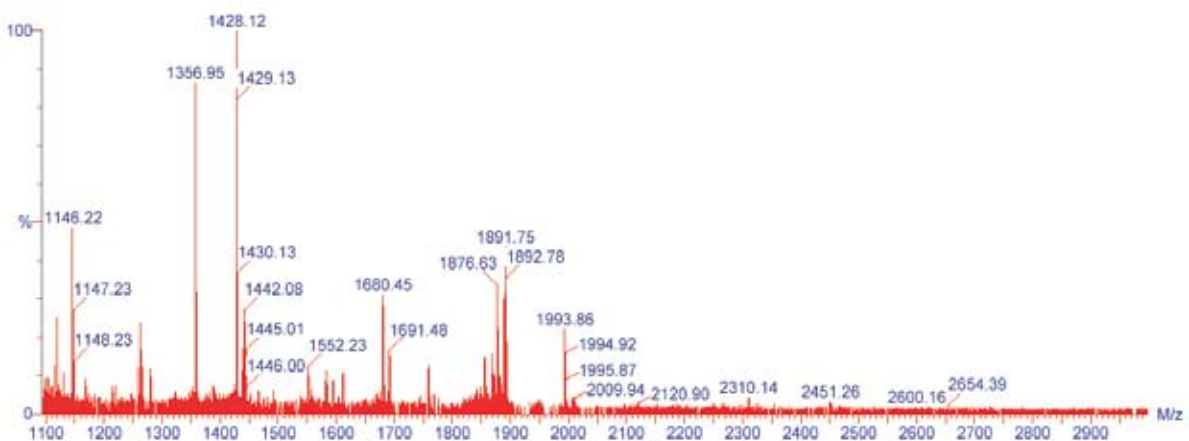
### *Excellent Sensitivity*

VisPRO™ 5 minutes Protein Stain Kit can detect proteins as little as 1 ng, comparable to silver and Sypro Ruby stain, and much more sensitive than Coomassie Brilliant blue stain. Protein from microgram can be visualized with good staining dynamic ranges. Unlike other staining methods requiring the interaction between dye molecules and proteins that generates the staining preference between proteins species, the negative staining nature makes VisPRO™ 5min Protein Stain Kit visualizes all proteins.

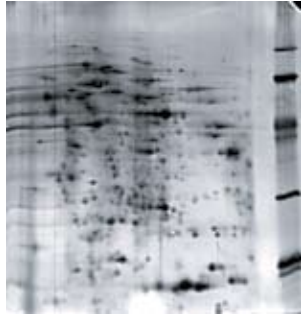
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### *Full Compatible with Downstream Applications*

VisPRO 5 minutes Protein Stain reaction can be completely erased. Stained gels can be re-stained by other staining methods. Besides proteins in stained gels can be further eluted or electroblotted onto PVDF or nitrocellulose membranes. In additions, proteins on stained gel can be analyzed by mass spectrometry.




The MALDI-TOF spectrum of spots from zinc reverse staining. The VisPRO™ Protein Staining spot of phosphorylase b was cut and subjected to mass sample preparation. The observed ionized fragments of rabbit phosphorylase b were annotated.



## Application in Current Proteomics

VisPRO™ 5 Minutes Protein Stain Kit perfectly matches to current proteomic research. Generally, more protein spots can be detected in 2-DE gels by this robust staining method, compared to silver and Sypro Ruby staining. Moreover, the unfixing nature has it very ideal for subsequent analysis by mass spectrometry. Proteins developed by VisPRO™ 5min Protein Stain usually have a higher rate of good annotation.

## Comparison of Various kinds of Decoration Methods

Method	VisPRO™ 5 minutes Protein Stain kit	Sypro Ruby	Silver Stain	CBR Stain
Image Equipment	Visible light	bioluminescence	Visible light	Visible light
Stimulate and Toxicity	no	Acetic acid, Methanol	Acetic acid, Silver Nitrate, Glutaraldehyde	Acetic acid, Methanol
Chemical				
Sensitivity	1 ng	1 ng	1 ng	50 ng
Linear range	1-2000 ng	1-1000 ng	1-100ng	50-1000 ng
Downstream Exp	Yes	Yes	No (Protein Cross link)	Yes, but limited
Time Consuming	 5-10 min	18 Hrs	4-20 Hrs	1-8 Hrs

*Important notification for staining 2D gels!!*

- ◆ In some circumstance, the pH value and wetness of 2D gels are greatly changed during long time of electrophoresis. It is highly recommended to turning your 2D gel conditions by submerge it in SDS electrophoresis buffer(Tris/glycine buffer) for 5-10 minutes before adding Solution I. It is not required to wash the tuned gel before adding Solution I.
- ◆ 50ml and 100ml of Solution I/II are sufficient to stain 16x18cm and 24x20 cm 2D gels respectively.
- ◆ Because the 2D gel is often thicker, it's recommended to extend incubation of Solution I to 10-15 minutes for better staining results. It's recommended to cut the desired protein spots for the stained gel right after the staining.



Cat No	Product Name	Package Size
VP-PS001	Prostain system	VisPRO™ 5 Minutes Protein Stain Kit x 5 LIAS Xlite 30R Nonlinear Phoretix 2D Advanced
VP-PS101	VisPRO™ 5 Minutes Protein Stain Kit	Sensitizing solution 250ml x 2 Developing solution 250ml x 2
AG-LA030	LIAS Xlite 30R	Avegene Stanard
NL-PH2DA	Nonlinear Phoretix 2D Advanced	1xCD Professional 2D gel analysis software