## **Electrophoresis, Blotting and Immunodetection**

Gel visualisation, protein stains, Coomassie® based

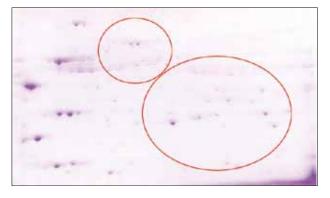
PN

NEW

Imperial protein stain, Thermo Scientific Pierce

# SCIENTIFIC

### i nermo scientific Imperial protein stain



#### Thermo Scientific Imperial protein stain reveals spots that are faint or not detected with

other coomassie stains. Mitochondrial protein extract was prepared from heart tissue of six-week-old Sprague-Dawley rat. Processed protein extract (72 µg) was focused on a pH 5-8 IPG strip followed by 8-16% SDS-PAGE. The gels were stained for 1 hour and destained overnight following manufacturerrecommended protocols.

A fast, sensitive and consistent Coomassie® stain.

- Sensitive 3ng protein/band and less can be detected with the enhanced protocol (3hr)
- Fast detect as little as 6ng protein/band in just 20min
- Robust highly consistent, reproducible protein staining
- Excellent photo-documentation photographs/scans better than other coomassie stains
- Mass spectrometry-compatible stained spots and bands can be excised and treated just like with any coomassie stain



Thermo Scientific Imperial protein stain is a ready-to-use coomassie stain for the detection of protein bands in sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE) and 2D gels.

The stain is a unique formulation of Coomassie® R-250 that delivers substantial improvements in protein-staining performance compared to homemade or other commercial stains.

In addition to faster protein band development and more sensitivity than standard Coomassie® G-250 stains, this stain does not require methanol/acetic acid fixation and destaining, saving valuable preparation time and minimising reagent cost.

Catalogue No	Description
PN24615	Imperial protein stain, 1L Sufficient reagent to stain up to 50 mini-gels (80 x 100mm)
PN24617	Imperial protein stain, 3 x 1L Sufficient reagent to stain up to 150 mini-gels (80 x 100mm)



Lane 1: 6µg protein mix Lane 2: 1µg rabbit IgG Lane 3: 1µg reduced BSA Lane 4: 5µg *E. coli* Iysate Lane 5: 20ng reduced BSA Lane 6: 10ng reduced BSA Lane 7: 7ng reduced BSA Lane 8: 3ng reduced BSA Lane 9: 10µL Mark12™ Standard Lane 10: 5µL Mark12™ Standard 50

32

M.W. 825.99

Sensitive staining results with SimplyBlue™ SafeStain

Samples were separated on a NuPÄGE∗ Novex 4 to 12% Bis-Tris gel, stained with SimplyBlue™ SafeStain for 1 hour, then destained overnight with the recommended water-based destain.

Protein stains, Coomassie<sup>®</sup>, SimplyBlue<sup>™</sup> SafeStain

Ready to use, fast, sensitive, and safe Coomassie® G-250 stain for visualising protein bands on polyacrylamide gels.

This stain eliminates extensive solution preparation time and expenditure. Unlike traditional R-250 and some G-250 Coomassie® stains, SimplyBlue™ SafeStain is completely non-hazardous and does not require methanol or acetic acid fixatives or destains. Risk of hazardous exposure and unpleasant odours are eliminated, creating a healthier lab environment. The SimplyBlue™ SafeStain protocol is easy to perform and can be completed in less than 3hr. For added speed, a simple microwave procedure can be completed in 12min. Destaining is not required, but may be performed to achieve maximum sensitivity, especially when performing downstream analysis such as mass spectrometry or when a crystal clear background is required. One microgram of protein can be detected after just 5min in the stain. With additional water-based destaining, as little as 7ng of protein (reduced BSA) can be detected.

#### SimplyBlue<sup>™</sup> SafeStain

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-ast, sensitive, a	nd sate (	Coomassie® protein stain
Cataloque No	Quant	itv

Catalogue No	Qualitity
VXLC6060	1L (1L provides sufficient reagent to stain 50 mini gels)
VXLC6065	3.5L (with pump dispenser)

### **Coomassie® Brilliant Blue R-250**

**F** Commonly used for staining proteins in polyacrylamide gels.

isher BioReagents®		
Catalogue No BPE101-25 BPE101-50	Quantity 25g 50g	

 $C_{45}H_{44}N_{3}O_{7}S_{2}Na$ 

Coomassie® is a registered trade trademark of ICI plc.

Coomassi	e® Brilliant Blue	G-250		
F	A general protein stain.			32
Fisher BioReagents®				
Catalogue No		Quantity		
BPE100-25		25g		
BPE100-50		50g		
C <sub>47</sub> H <sub>48</sub> N <sub>3</sub> O <sub>7</sub> S <sub>2</sub> Na			M.W. 85	54.01

Coomassie® is a registered trade trademark of ICI plc.