INSTRUCTIONS

Pierce® Zinc Reversible Stain Kit

24582

0797.3

Number	Description
24582	**Pierce Zinc Reversible Stain Kit,** contains sufficient reagents to stain up to 20 mini gels

Kit Contents:

Zinc Stain, 500mL

Zinc Developer, 500mL

Zinc Eraser, 500mL

Storage: Upon receipt store kit at room temperature. Product shipped at ambient temperature.

Introduction

The Thermo Scientific Pierce Zinc Reversible Stain Kit provides rapid detection of proteins on SDS-PAGE with sensitivity equivalent to silver stain (0.25ng). The kit uses a simple, two-step procedure that requires less than 15 minutes to complete. The result is a negative stain with an opaque white background and clear protein bands. The bands are visualized by placing the gel against a dark background. The white background can be removed with the eraser solution and the gel can be restained with a permanent stain such as Thermo Scientific GelCode Blue Stain Reagent (Product No. 24590) or Thermo Scientific Pierce Silver Stain Kit (Product No. 24612). Alternatively, the gel can be destained with a Tris-glycine buffer, allowing proteins to be eluted or transferred for Western blotting. The eluted protein is free of dye contamination, making it ideal for downstream applications such as antibody generation or immunological detection. All reagents are provided ready to use, making this an ideal stain for multiple applications.

Procedure for Gel Staining and Destaining

1. Place gel in a container with 25-50mL of Zinc Stain. The gel must be completely immersed in the solution.

   Note: The amount of stain required depends on the tray size being used. Typically, 25mL of stain is sufficient for one 8 × 10cm gel.

2. Place container on a shaker and agitate for 10 minutes
3. Remove the stain solution and add 25-50mL of Zinc Developer. Allow 1-2 minutes for the stain to develop. Check stain development against a dark background.
4. Once protein bands are clearly discernible against a dark background, stop stain development by removing the developer solution and adding water. Rinse gel twice for 1 minute with water. The gel may be kept in water for up to two weeks.
5. To destain (see Note below), place gel in a container with 25-50mL of Zinc Eraser. Agitate gel until stain is removed. Rinse gel several times with water.

   Note: For Western transfer or protein elution, destain gel with 25-50mL of Tris-glycine buffer at pH 8 (e.g., 25mM Tris, 192mM glycine; Product No. 28380).

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Troubleshooting

Problem	Possible Cause	Solution
Protein bands are indiscernible after staining	The stain was overdeveloped	Partially destain gel until bands become discernible, then stop destaining with a water rinse
		To prevent overdevelopment, monitor staining against a dark background
	No protein was present in the sample	Check protein concentration in the original sample

Related Thermo Scientific Products

89871 **In-Gel Tryptic Digestion Kit,** sufficient reagents for approximately 150 in-gel digestions

25200-44 **Precise™ Protein Gels,** see catalog or web site for a complete listing

24615 **Imperial™ Protein Stain,** 1L, sufficient reagent to stain up to 50 mini gels

24590 **GelCode® Blue Stain Reagent,** 500mL, sufficient reagents to stain up to 25 mini gels

24592 **GelCode Blue Stain Reagent,** 3.5L, sufficient reagents to stain up to 175 mini gels

24612 **Pierce Silver Stain Kit**, sufficient reagents to stain up to 20 mini gels

24597 **Color Silver Stain Kit,** sufficient reagents to stain 25 (18cm^2) or 40 (10 × 13cm) 2D gels

Current product instructions are available at *www.thermoscientific.com/pierce*. For a faxed copy, call 800-874-3723 or contact your local distributor.

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