

### Hi-Zinc Stain

<u>Product Name</u>	<u>Product Code</u>	<u>Kit Packing</u>
Hi-Zinc Stain	ML057-125ML	125 ml
	ML057-250ML	250 ml

#### Introduction

Hi-Zinc Stain is a zinc-based reversible, highly sensitive protein gel stain that rapidly develops protein bands on polyacrylamide gels after electrophoresis. This staining solution is compatible with both native and SDS-denatured gels and no destaining is required for the visualization of protein bands.

#### Description

Hi-Zinc Stain is a unique staining solution as it functions in a reversible way as the protein bands on the polyacrylamide gels disappear completely after treatment with the Hi-Zinc Destain solution (ML058). This staining solution acts in a single step and is based upon the interaction of zinc ions with the protein bands and polyacrylamide gels. Hi-Zinc Stain turns the gel opaque white by depositing zinc metal precipitate in it while the SDS coating on the proteins prevents the stain from binding to the proteins and as a result a negative image of the gel is produced where clear protein bands are visualized against the opaque white polyacrylamide background. The simple two-step staining procedure is very rapid and sensitive compared to the standard coomassie staining procedure. Gels stained with the Hi-Zinc Stain can be transferred for immunoblotting procedures after destaining in 5 minutes with Hi-Zinc Destain (ML058). The solutions are supplied as 10X concentrate and should be diluted to 1X before use.

#### Composition

Hi-Zinc Stain contains two solutions:

Product Code	Reagents	Quantity	
		125ML	250ML
ML057A	10X Staining Solution I (10X Imidazole Solution)	125 ml	250 ml
ML057B	10X Staining Solution II (10X Zinc sulphate Solution)	125 ml	250 ml

#### Procedure

1. After the completion of SDS-PAGE, transfer the gel to a container with 50 ml of 1X diluted Staining Solution I. (Dilute 10X Solution I to 1X before use by mixing one part of it with nine parts of water).
2. Incubate at room temperature for 10 minutes with gentle rocking.
3. Discard the Imidazole solution and add 50 ml of diluted Solution II. (Dilute the 10X Solution II to 1X before use. Make sure the gels are completely immersed in the solution).

4. Dark color protein bands will appear in milky white background within few seconds. To visualize the bands the gel should be placed on dark background. The protein bands will be visible as dark bands against an opaque white background.

#### **Properties**

Appearance	:	Colorless solution
Clarity	:	Clear and free of particles
Suitability test	:	This solution has been tested and is suitable for use for staining protein gels

#### **Storage conditions**

Hi-Zinc Stain has to be stored at room temperature (15-25°C). Under recommended condition, the reagent is stable for 12 months.

#### **Warning and Precautions**

Not for Medicinal Use. Read the SDS carefully before beginning the protocol. Wear protective gloves/protective clothing/eye protection/face protection. Follow good clinical laboratory practices while handling clinical samples. Standard precautions should be followed as per established guidelines. Safety guidelines may be referred in safety data sheets of the product.

#### **Performance and Evaluation**

Performance of the solution is expected when the solution is stored at recommended temperature and within the expiry period.









#### **Safety Information**

The Hi-Zinc Stain is for laboratory use only, not for drug, household or other uses. Take appropriate laboratory safety measures and wear gloves and safety goggles when handling. Not compatible with disinfecting agents containing bleach. Please refer the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

#### **Technical Assistance**

At HiMedia we pride ourselves on the quality and availability of our technical support. For any kind of technical assistance, mail at [mb@himedialabs.com](mailto:mb@himedialabs.com).

## Symbol

	Manufacturer		Do not use if package is damaged
	Batch code		Temperature limit
	Date of manufacture (YYYY-MM)		Consult instructions for use
	Use-by date (YYYY-MM)		Catalogue number

Identification No.: PIML057

Rev No.: 03

Date of Issue: 2026-01

### Disclaimer :

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