

## Fast-dissolving Dual-color Protein Loading Buffer (Denaturing, Reducing, 5×)

INSTRUMENT MANUAL

Research use only. Not for diagnostic procedures.

## **Contents and storage**

Fast-dissolving Dual-color Protein Loading Buffer (Denaturing,

Reducing, 5×) GB4353-5 1mL×5 GB4353-15 1mL×15 GB4353-75 1mL×75

Storage: Store at -20°C for 12 months. Product shipped at room temperature.

## Introduction

This 5× SDS-PAGE sample loading buffer is dual-colored and formulated for reducing conditions. It contains lithium dodecyl sulfate at pH 8.4, ensuring optimal activity of the reducing agent. Upon removal from -20°C, the buffer thaws rapidly, saving valuable time. A novel reducing agent provides strong reduction capabilities without the unpleasant odor associated with  $\beta$ -mercaptoethanol or DTT. Furthermore, this buffer includes both a blue tracking dye for electrophoresis and a special red dye. The red dye co-transfers to the membrane with protein samples, clearly indicating lane positions and allowing for easy monitoring of transfer efficiency.

## **Quick Start Protocol**

- 1. Ensure the sample loading buffer is completely thawed.
- 2.In a clean tube, mix one part Sample Buffer with four parts protein sample (e.g., combine 5 µL of Sample Buffer with 20 µL of protein sample). Note: Insufficient dilution of the sample buffer may result in a diffuse dye front.
- 3.Boil the mixture for 5 to 10 minutes to ensure complete protein denaturation.
- 4. Centrifuge the sample at 10,000  $\times$  g for 5 minutes.
- 5. The resulting supernatant is now ready for SDS-PAGE analysis.