



YamayBio

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

QUICK START GUIDE

For research use only.  
Not for use in diagnostic procedures.

# Contents and Storage

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

GB4353-5 1 mL × 5

GB4353-15 1 mL × 15

GB4353-75 1 mL × 15 × 5

**Storage:** Store at -20 °C for 12 months. The product is shipped at room temperature.

## Introduction

This 5 × SDS-PAGE sample loading buffer is dual-colored and formulated for reducing conditions. Lithium dodecyl sulfate is included at pH 8.4 to support efficient protein denaturation and reduction.

When removed from -20 °C storage, the buffer thaws quickly, reducing preparation time. A proprietary reducing agent delivers effective reduction without the unpleasant odor commonly associated with β-mercaptoethanol or DTT. Furthermore, this buffer includes both a blue tracking dye for electrophoresis and a distinct red dye that co-transfers to the membrane, enabling clear visualization of lane positions and convenient 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. Heat the mixture at 95-100 °C for 5 to 10 minutes to ensure complete protein denaturation.
4. Centrifuge the sample at 10,000 × *g* for 5 minutes.
5. The supernatant is ready for SDS-PAGE analysis.