

ClearBand 1M Tris, pH 7.4

Troubleshooting Guide

500 ml, 1000 ml, 5x500 ml, 5x1000 ml

Cat No: T7405, T7410, T74055, T74105

Use this guide for common preparation and use problems with ClearBand 1M Tris, pH 7.4. The product is a pre-mixed, pH-adjusted, sterile-filtered 1 M Tris solution that can be diluted to the concentration required by molecular biology or general biochemistry workflows.

Before You Start - Quick Checks

1. Store at room temperature.
2. Confirm that the selected Tris stock has the pH required by the downstream protocol.
3. Calculate dilutions from the labeled 1 M stock concentration.
4. Use clean technique when dispensing the sterile-filtered stock.

Problem	Most likely cause	Recommended action
Working buffer has the wrong Tris concentration	The 1 M stock may have been diluted with an incorrect stock-to-final ratio.	Recalculate the dilution from the labeled 1 M concentration and prepare a fresh working solution.
Working buffer pH is not appropriate for the protocol	A Tris stock with a different labeled pH may have been selected.	Verify that the bottle is ClearBand 1M Tris, pH 7.4, and use the pH specified by the downstream protocol.
Results differ after switching Tris stock	The replacement stock may have a different pH even though the Tris concentration is the same.	Compare both the concentration and labeled pH of the Tris stocks before use.
Unexpected assay or gel behavior after buffer preparation	The final buffer may have been prepared at the wrong Tris concentration or from the wrong pH stock.	Verify the dilution calculation and confirm the pH 7.4 stock was used before changing other protocol variables.
Stock was diluted but final volume is incorrect	The diluent volume may have been added without accounting for the volume of 1 M stock.	Prepare to the intended final volume using the calculated amount of 1 M Tris plus diluent.
Concern about contamination after repeated use	Repeated dispensing may compromise clean handling of the sterile-filtered solution.	Use clean dispensing technique and avoid introducing used pipettes or contaminated tools into the stock bottle.
Bottle was stored outside room-temperature conditions	Storage did not follow the datasheet recommendation.	Return the stock to room-temperature storage and verify appearance before preparing new working solutions.
Prepared buffer is not reproducible between batches	Dilution method or selected Tris pH may vary between preparations.	Standardize the stock pH, dilution calculation, final volume, and dispensing method for each batch.

Still having trouble? Confirm that the correct pH 7.4 stock was selected, the dilution was calculated from 1 M, and the stock has been kept at room temperature with clean handling.