

ClearBand 10x Phosphate Buffered Saline with Tween 20, pH 7.4

Troubleshooting Guide

500 ml, 1000 ml

Cat No: PBST1005, PBST1010

Use this guide for common dilution and wash-buffer problems with ClearBand 10x PBST, pH 7.4. The stock is designed for Western blotting and ELISA, should be diluted to 1x, and the 1x formulation contains 0.05% Tween 20.

Before You Start - Quick Checks

1. Store the 10x stock at room temperature.
2. Dilute to 1x before use.
3. Use diluted 1x PBST within 1 week.
4. The 1x formulation contains 0.05% Tween 20 and no calcium or magnesium.

Problem	Most likely cause	Recommended action
Wash buffer is too concentrated	The 10x stock may have been used without dilution.	Dilute ClearBand 10x PBST to 1x before use.
Wash buffer is too dilute	The stock-to-water ratio may be incorrect.	Recalculate the 10x-to-1x dilution and prepare a fresh working solution.
Background differs from previous wash buffer	The detergent content may differ from the previously used formulation.	Confirm that the intended working buffer is 1x PBST containing 0.05% Tween 20.
Antibody-antigen wash behavior is inconsistent	The working PBST concentration may vary between preparations.	Standardize preparation of 1x PBST from the 10x stock and use the same formulation throughout the experiment.
Diluted PBST has been stored for too long	The 1x working solution may be older than the datasheet recommendation.	Prepare fresh 1x PBST and use it within 1 week.
Wrong buffer was used for a detergent-free wash	PBST contains Tween 20 whereas PBS does not.	Use plain PBS when the protocol requires a detergent-free wash.
Results vary between working-solution batches	Dilution ratio, age of 1x PBST, or preparation technique may differ.	Standardize the 10x-to-1x dilution and working-solution age across experiments.
Concern about divalent cations	The workflow may require knowledge of calcium/magnesium content.	The datasheet states that ClearBand PBST does not contain calcium or magnesium; verify that this formulation is appropriate for the application.

Still having trouble? Confirm a correct 10x-to-1x dilution, 0.05% Tween 20 in the 1x formulation, room-temperature stock storage, and use of diluted PBST within 1 week.