

sigma-aldrich.com

3050 Spruce Street, St. Louis, MO 63103 USA Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757 email: techservice@sial.com sigma-aldrich.com

Product Information

Stabilyser Reagent

for stabilization of DNA, RNA, and protein in tissue extracts

Catalog Number **PNS1010** Storage Temperature 2–8 °C

TECHNICAL BULLETIN

Product Description

Stabilyser Reagent is a proprietary formulation of detergents and solutes optimized for efficient extraction of protein, DNA, and RNA from tissue samples. The unique composition of Stabilyser Reagent enables isolation of functionally active proteins, while maintaining integrity of the nucleic acids. The Stabilyser Reagent is compatible with Western blotting protocols, functional protein activity assays, and nucleic acid applications like qPCR.

Optional Reagents and Required Equipment Not Provided

Protease Inhibitor Cocktail (Catalog Number P8340, P8849, or P1860 Phosphatase Inhibitor Cocktail (Catalog Number P2850, P0044, or P5726. Protease and Phosphatase Inhibitor Cocktail (Catalog Number PPC1010) Mechanical homogenizer Centrifuge Sample tubes

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

The Stabilyser Reagent is supplied ready to use.

Storage/Stability

Store the product at 2–8 °C.

Product may yellow after extended period of storage. Product performance is unaffected and may be used.

Procedure

The volume of Stabilyser Reagent to be added to the tissue varies based on tissue type and desired protein or nucleic acid concentration required.

In general, it is recommended to start optimization with 20 μ L of Stabilyser Reagent per mg of tissue.

For best results, it is recommended to use fresh or flash frozen tissue samples prepared directly after harvest. Flash frozen tissue should remain frozen until added to the Stabilyser Reagent and homogenized with the mechanical homogenizer of choice.

For some applications, lysis at 4 °C and the addition of protease and/or phosphatase inhibitors might be advantageous.

- 1. Determine tissue weight and aliquot appropriate volume of Stabilyser Reagent into a clean tube compatible with the volume of reagent needed and mechanical homogenizer being used during tissue disruption.
- 2. Add fresh or flash frozen tissue into pre-aliquoted Stabilyser Reagent and immediately perform the mechanical homogenization of the tissue.
- 3. Centrifuge the homogenized sample for 15 minutes at $12,000-20,000 \times g$ to pellet debris.
- 4. Remove clarified supernatant to a clean tube.
- 5. For long term storage, it is recommended to store lysate at -70 °C.

NP,MAM 11/17-1

©2017 Sigma-Aldrich Co. LLC. All rights reserved. SIGMA-ALDRICH is a trademark of Sigma-Aldrich Co. LLC, registered in the US and other countries. Sigma brand products are sold through Sigma-Aldrich, Inc. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see product information on the Sigma-Aldrich website at www.sigmaaldrich.com and/or on the reverse side of the invoice or packing slip.