

SOP 3.11.5 Protein Extraction from Tissue

SOP Number: 3.11.5
Version Number 1.0

	Name	Title	Date
Author			
Authoriser			

Effective Date	
Version Number	

Purpose

This SOP describes the procedure for protein extraction from tissue.

Responsibility

It is the responsibility of the research laboratory personnel carrying out this procedure to ensure that all steps are completed both competently and safely.

Equipment/reagent requirements

- Cell lysis solution
- Proteinase inhibitor solution
- Homogeniser
- A refrigerated centrifuge capable of 12,000g
- A vortex
- -80°C Freezer
- A spectrophotometer capable of reading 260 and 280nm

Procedure

1. Homogenisation: The tissue should be homogenised in 1mL Cell Lysis Buffer (CellLytic™-M lysis/extraction reagent, Sigma Aldrich).
2. A commercial protease inhibitor solution (for example P3840 Sigma-Aldrich) may be added to the CellLytic™-M reagent to reach a final concentration of 1X in the buffer.
3. Centrifuge the lysed cells for 15 min at 12,000-20,000g at 4°C to pellet the cellular debris.
4. Remove the protein-containing supernatant to a chilled test tube and store at -80°C.

Change History

SOP Number	Effective Date	Significant Change	Previous SOP No.
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