LSOP Title	Fluorescamine Method to Calculate Total Amino Acids
LSOP No.	LSOP12
Version	1.1
Location	UQ Node/Centre-wide
Policy/Procedure Link	
Risk Assessments	
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1.0 Scope

This procedure covers the protocol for calculating total amino acids using the Fluorescamine Method.

This LSOP does not cover the extraction from plant material.

2.0 Definitions

ddH_2O – double distilled water

RT – Room Temperature

Na-Borate – Sodium Borate

3.0 Material and Equipment

1. Synergy Microplate Reader
2. Glutamate
3. Fluorescamine
4. ddH_2O
5. Na-Borate

6. Pipette & Pipette Tips
7. Eppendorf Tubes 

4.0 Prescribed Actions

1. Create standards with glutamate at concentrations of
    a. 0 uM
    b. 100 uM
    c. 200 uM
    d. 400 uM
    e. 600 uM
    f. 800 uM
2. Duplicate 4 uL aliquots of the filtered aqueous extract from the methanol/chloroform extraction.
3. Add to standards and duplicates:
    a. 100 uL ddH2O
    b. 15 uL 0.1 M Na-Borate (pH 8)
    c. 90 uL of 0.1% (w/v) fluorescamine (in acetonitrile)
4. Incubate at RT for 5 min
5. Fluorescence at 485 nm in a Synergy Microplate Reader with excitation at 405 nm.
6. Use a standard curve to calculate your total amino acids in nmol/gFW

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