

Extraction of Non-Protein Amino Acids from Cyanobacteria for Liquid Chromatography-Tandem Mass Spectrometry Analysis

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Materials

| Name | Company | Catalog Number | Comments |
|-----------------------------------|------------------------|-----------------|--|
| 1 mL glass shell vials | SHIMADZU | REST-24663 | |
| 10% TCA solution | | | Dilute 100% (w/v) to 10% aqueous TCA |
| 100% TCA solution | | | Dissolve TCA in water according to the following ratio 2.2 g:1 mL (TCA:H ₂ O) |
| 1000 µL micropipette | Ependorf/Sigma-Aldrich | Z683809 | |
| 13.3% TCA solution | | | Dilute 100% (w/v) to 13.3% aqueous TCA |
| 2 mL tubes | MERCK | BR780546-500EA | |
| 20 mM HCl | Chem-Supply Pty Ltd | 7647-01-0 | Made from stock |
| 20-200 µL micropipette | Ependorf/Sigma-Aldrich | Z740441 | |
| 6 M HCl | Chem-Supply Pty Ltd | 7647-01-0 | Made from stock |
| 70% ethanol | Supelco | 1.11727 | Dilute 70:1 Ethanol:water |
| -80 °C Freezer | Martin CHRIST | 102142 | Alpha 2-4 Ldplus |
| AccQ-Tag Ultra Derivatization Kit | Waters | 186003836 | |
| Acetone | Chem-Supply Pty Ltd | 34967-2.5L | |
| Analytical Scale Balance | | | |
| Centrifugal evaporator | Thermo Scientific | 13442549 | DNA120-115 SpeedVac Concentrator |
| Centrifuge | MERCK | EP022620100-1EA | |
| D5-2,4-DAB standard | CDN Isotopes | D-7568 | |
| Drying Oven | | | |
| Ez:faast™ Amino Acid Analysis Kit | Phenomenex | CEO-8492 | |
| Falcon tube holder | | | |
| Falcon Tubes | MERCK | T2318-500EA | Greiner centrifuge tubes |
| Filter Tubes | Sigma-Aldrich | CLS8161-100EA | Corning Costar Spin-X centrifuge tube filters (pore size 0.22 µm) |

| | | | |
|-----------------------------------|---------------------------|-----------------------|--|
| Glass engraver | | | |
| Hydrolysis vial & Lid | Eldex Laboratories/Waters | WAT007568 & WAT007569 | |
| Ice and container | | | |
| Lint-free paper wipe | Kimwipes/Sigma-Aldrich | Z188956 | |
| Milli-Q water | | | 18.2 MΩ.cm |
| Nitrogen tap with hose | | | |
| P1000 Micropipette | MERCK | EP3123000063 | |
| P1000 pipette tips | MERCK | Z740127 | |
| P200 Micropipette | MERCK | EP3123000055-1EA | |
| P200 pipette tips | MERCK | Z740125 | |
| Parafilm | MERCK | P7793 | Sealing film |
| PPE - noise cancelling headphones | | | |
| PPE - oven gloves | | | |
| Probe sonicator | QSONICA Sonicators | Q125 Sonicator | Please ensure all appropriate PPE (i.e. noise cancelling headphones) |
| Sample transfer spatula | | | |
| Trichloroacetic acid (TCA) | Sigma-Aldrich | T6399-1KG | |
| Tweezers | | | |
| Vacuum Pump with hose | | | |