

Materials List for:

Isolation and Respiratory Measurements of Mitochondria from *Arabidopsis thaliana*

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Materials

| Name | Company | Catalog Number | Comments |
|--|----------------------|----------------|--------------------------------------|
| ADP | Sigma-Aldrich | A2754 | Chemical |
| Antimycin A | Sigma-Aldrich | A8674 | Chemical, dissolve in ethanol |
| AOX antibody | from Tom Elthon | | Elthon et al., 1989 |
| Ascorbate | Sigma-Aldrich | A0157 | Ascorbate Oxidase from Cucurbita sp. |
| ATP | Sigma-Aldrich | A26209 | Chemical |
| Bovine serum albumin (BSA) | Bovogen | BSAS 1.0 | Chemical |
| Clarity western ECL substrate | Bio-Rad Laboratories | 1705061 | Chemical |
| Criterion Stain-Free Precast Gels 8-16% 18 Wells | Bio-Rad Laboratories | 5678104 | Chemical |
| Cyanide | Sigma-Aldrich | 60178 | Chemical |
| Cytochrome c | Sigma-Aldrich | C3131 | Chemical |
| Difco Agar, granulated | BD Biosciences | 214530 | Chemical |
| Dithiothreitol | Sigma-Aldrich | D0632 | Chemical |
| EDTA disodium salt | Sigma-Aldrich | E5134 | Chemical |
| Gamborg B-5 Basal Medium | Austratec | G398-100L | Chemical |
| Gamborg Vitamin Solution (1000x) | Austratec | G219-100ML | Chemical |
| Goat Anti-Mouse IgG (H + L)-HRP Conjugate | Bio-Rad Laboratories | 1706516-2ml | Chemical |
| Goat Anti-Rabbit IgG (H + L)-HRP Conjugate | Bio-Rad Laboratories | 1706515-2ml | Chemical |
| L-Cysteine | Sigma | C7352-100G | Chemical |
| Magnesium sulfate | Sigma-Aldrich | 230391 | Chemical |
| Murashige & Skoog Basal Salt Mixture (MS) | Austratec | M524-100L | Chemical |
| Myxothiazol | Sigma-Aldrich | T5580 | Chemical, dissolve in ethanol |
| NADH | Sigma-Aldrich | N8129 | Chemical |
| Ndufs4 antibody | from Etienne Meyer | | Meyer et al., 2009 |
| n-Propyl gallate | Sigma-Aldrich | P3130 | Chemical, dissolve in ethanol |
| Percoll | GE Healthcare | 17-0891-01 | Chemical, colloidal density gradient |
| Polyvinylpyrrolidone (PVP40) | Sigma-Aldrich | PVP40 | Chemical |
| Potassium cyanide | Sigma-Aldrich | 60178 | Chemical |
| Potassium phosphate monobasic (KH ₂ PO ₄) | Sigma-Aldrich | P5655 | Chemical |

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|--|-----------------------|-----------------|--------------------------------------|
| Pyruvate | Sigma-Aldrich | P2256 | Chemical |
| Sodium chloride | Chem-Supply | SA046 | Chemical |
| Sodium dithionite | Sigma-Aldrich | 157953 | Chemical |
| Sodium L-ascorbate | Sigma | A4034-100G | Chemical |
| Succinate | Sigma-Aldrich | S2378 | Chemical |
| Sucrose | Chem-Supply | SA030 | Chemical |
| TES | Sigma-Aldrich | T1375 | Chemical |
| Tetrasodium pyrophosphate (Na ₄ P ₂ O ₇ · 10H ₂ O) | Sigma-Aldrich | 221368 | Chemical |
| Trans-Blot Turbo RTA Midi Nitrocellulose Transfer Kit | Bio-Rad Laboratories | 1704271 | Chemical |
| Triton-X 100 | Sigma-Aldrich | X100 | Chemical, detergent |
| Western Blocking Reagent | Sigma | 11921681001 | Chemical |
| Balance | Mettler Toledo | XS204 | Equipment |
| Beakers | Isolab | 50 mL | |
| Centrifuge | Beckman Coulter | Avanti J-26XP | Equipment |
| Centrifuge tubes | Nalgene | 3117-9500 | Equipment |
| Circulator | Julabo | 1124971 | Attached to oxygen electrode chamber |
| Conical flask | Isolab | 500 mL | |
| Dropper | | 3 mL | |
| Fixed angle rotor | Beckman Coulter | JA25.5 | Equipment |
| Funnel | Per Alimenti | 14 cm | For filtering |
| Gradient pourer | Bio-Rad | 165-4120 | For preparation of gradients |
| Magnetic Stirrer ATE | VELP Scientifica | F20300165 | Equipment |
| Miracloth | VWR | EM475855-1R | Filtration material |
| Mortar and pestle | Jamie Oliver | Granite, 6 Inch | Equipment |
| O2view | Hansatech Instruments | | Oxygen monitoring software |
| Oxygraph Plus System | Hansatech Instruments | 1187253 | Clark-type oxygen electrode |
| Paintbrush | Artist first choice | 1008R-12 | |
| Parafilm | Bemis | PM-996 | plastic paraffin film |
| Peristaltic pump | Gilson | F155001 | For preparation of gradients |
| PVC peristaltic tubing | Gilson | F117930 | For preparation of gradients |
| Water bath | VELP Scientifica | OCB | Equipment |