

Materials List for:

Expression and Purification of Nuclease-Free Oxygen Scavenger Protocatechuate 3,4-Dioxygenase

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Materials

| Name | Company | Catalog Number | Comments |
|--|-----------------------------|---|-------------|
| 2-Mercaptoethanol | Sigma-Aldrich | M3148 | βME |
| 30% acrylamide and bis-acrylamide solution, 29:1 | Bio-Rad | 161-0156 | |
| Acetic acid, Glacial Certified ACS | Fisher Chemical | A38C-212 | |
| Agar, Granulated | BD Biosciences | DF0145-17-0 | |
| AKTA FPLC System | GE Healthcare Life Sciences | AKTA Purifier: Box-900, pH/C-900, UV-900, P-900, and Frac-920 | |
| Amicon Ultra-2 Centrifugal Filter Unit | EMD Millipore | UFC201024 | 10 kDa MWCO |
| Ammonium iron(II) sulfate hexahydrate | Sigma | F-2262 | |
| Ammonium Persulfate (APS) Tablets | Amresco | K833-100TABS | |
| Ampicillin | Amresco | 0339-25G | |
| Bacto Tryptone | BD Biosciences | DF0123173 | |
| BD Bacto Dehydrated Culture Media Additive: Bottle Yeast Extract | VWR | 90004-092 | |
| BIS-TRIS propane, >=99.0% (titration) | Sigma-Aldrich | B6755-500G | |
| Bromophenol Blue | Sigma-Aldrich | B0126-25G | |
| Coomassie Brilliant Blue | Amresco | 0472-50G | |
| Costar 96-Well Flat-Bottom EIA Plate | Bio-Rad | 2240096EDU | |
| DTT | P212121 | SV-DTT | |
| Dulbecco's Phosphate Buffered Saline 500ML | Sigma-Aldrich | D8537-500ML | PBS |
| Ethidium bromide | Thermo Fisher Scientific | BP1302 | |
| Glycerol | Fisher Scientific | G37-20 | |
| Granulated LB Broth Miller | EMD Biosciences | 1.10285.0500 | |
| Hi-Res Standard Agarose | AGTC Bioproducts | AG500D1 | |
| Imidazole | Sigma-Aldrich | I0250-250G | |
| IPTG | Goldbio | I2481C25 | |
| Leupeptin | Roche | 11017128001 | |
| Lysozyme from Chicken Egg White | Sigma-Aldrich | L6876-1G | |
| Magnesium Chloride Hexahydrate | Amresco | 0288-1KG | |
| Microvolume Spectrophotometer, with cuvet capability | Thermo Fisher | ND-2000C | |

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|--|-----------------------------|--------------|--------------------|
| NaCl | P212121 | RP-S23020 | |
| Ni-NTA Superflow (100 ml) | Qiagen | 30430 | |
| Novagen BL21 Competent Cells | EMD Millipore | 69-449-3 | SOC media included |
| Orange G | Fisher Scientific | 0-267 | |
| Pepstatin | Gold Biotechnology | P-020-25 | |
| PMSF | Amresco | 0754-25G | |
| Protocatechuic acid | Fisher Scientific | ICN15642110 | PCA |
| Sodium dodecyl sulfate | P212121 | CI-00270-1KG | |
| SpectraMax M2 Microplate Reader | Molecular Devices | | |
| Sterile Disposable Filter Units with PES Membrane> 250mL | Thermo Fisher Scientific | 09-741-04 | |
| Sterile Disposable Filter Units with PES Membrane> 500mL | Thermo Fisher Scientific | 09-741-02 | |
| Superose 12 10/300 GL | GE Healthcare Life Sciences | 17517301 | |
| TEMED | Amresco | 0761-25ML | |
| Tris Ultra Pure | Gojira Fine Chemicals | UTS1003 | |
| Typhoon 9410 variable mode fluorescent imager | GE Healthcare Life Sciences | | |
| UltraPure EDTA | Invitrogen/Gibco | 15575 | |
| ZnCl ₂ | Sigma-Aldrich | 208086 | |