

Materials List for:

Catalytic Scavenging of Plant Reactive Oxygen Species *In Vivo* by Anionic Cerium Oxide Nanoparticles

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Materials

Name	Company	Catalog Number	Comments
Cerium (III) nitrate hexahydrate	Sigma-Aldrich	238538-100G	
Molecular Biology Grade Water, Corning	VWR	45001-044	
Falcon 50 mL Conical Centrifuge Tubes	VWR	14-959-49A	
Poly (acrylic acid) 1,800 Mw	Sigma-Aldrich	323667-100G	
Fisherbrand Digital Vortex Mixer	Fisher Scientific	02-215-370	
Fisherbrand Digital Vortex Mixer Accessory, Insert Retainer	Fisher Scientific	02-215-391	
Fisherbrand Digital Vortex Mixer Accessories: Foam Insert Set	Fisher Scientific	02-215-395	
Ammonium hydroxide solution	Sigma-Aldrich	05002-1L	
PYREX Griffin Beakers, Graduated, Corning	VWR	13912-149	
RCT basic	IKA	3810001	
Eppendorf Microcentrifuge 5424	VWR	80094-126	
Amicon Ultra-15 Centrifugal Filter Units	Millipore-Sigma	UFC901024	
Allegra X-30 Series Benchtop Centrifuge	Beckman Coulter	B06314	
UV-2600 Spectrophotometer	Shimadzu	UV-2600 120V	
Whatman Anotop 10 syringe filter	Sigma-Aldrich	WHA68091102	
BD Disposable Syringes with Luer-Lok Tips	Fisher Scientific	14-829-45	
Zetasizer Nano S	Malvern Panalytical	Zen 1600	
1,1'-Diocadecyl-3,3',3'-tetramethylindocarbocyanine perchlorate	Sigma-Aldrich	42364-100MG	
Dimethyl Sulfoxide, ACS	VWR	BDH1115-1LP	
Sunshine Mix #1 LC1	Green Island Distributors, Inc	5212601.CFL080P	
Adaptis 1000	Convion	A1000	
TES, >99% (titration)	Sigma-Aldrich	T1375-100G	
Magnesium chloride	Sigma-Aldrich	M8266-1KG	
Air-Tite All-Plastic Norm-Ject Syringe	Fisher Scientific	14-817-25	

Kimberly-Clark Professional Kimtech Science Kimwipes Delicate Task Wipers	Fisher Scientific	06-666A	
Carolina Observation Gel	Carolina	132700	
Corning microscope slides, frosted one side, one end	Sigma-Aldrich	CLS294875X25-72EA	
Cork Borer Sets with Handles	Fisher Scientific	S50166A	
Perfluorodecalin	Sigma-Aldrich	P9900-25G	
Micro Cover Glasses, Square, No. 1	VWR	48366-045	
Leica Laser Scanning Confocal Microscope TCS SP5	Leica Microsystems	TCS SP5	
2',7'-Dichlorofluorescein diacetate	Sigma-Aldrich	D6883-250MG	
Dihydroethidium	Sigma-Aldrich	D7008-10MG	
Fisherbrand Premium Microcentrifuge Tubes: 1.5 mL	Fisher Scientific	05-408-129	
Eppendorf Uvette cuvettes	Sigma-Aldrich	Z605050-80EA	
Chlorophyll meter	Konica Minolta	SPAD-502	