

Materials List for

Characterizing Cellular Proteins with In-cell Fast Photochemical Oxidation of Proteins

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Materials

Name	Company	Catalog Number	Comments
15 mL Conical Centrifuge Tubes	Fisher Scientific	14-959-53A	any brand is sufficient
5 mL Gas Tight Syringe, Removable Luer Lock	SGE Analytical Science	008760	
50 mL Conical Centrifuge Tubes	Fisher Scientific	14-432-22	any brand is sufficient
500 µL SGE Gastight Syringes: Fixed Luer-Lok Models	Fisher Scientific	SG-00723	
Acetone, HPLC Grade	Fisher Scientific	A929-4	4 L quantity is not necessary
Acetonitrile with 0.1% Formic Acid (v/v), LC/MS Grade	Fisher Scientific	LS120-500	
ACQUITY UPLC M-Class Symmetry C18 Trap Column, 100 Å, 5 µm, 180 µm x 20 mm, 2G, V/M, 1/pkg	Waters	186007496	
ACQUITY UPLC M-Class System	Waters	ACQUITY UPLC M-Class System	
Aluminum Foil	Fisher Scientific	01-213-100	any brand is sufficient
Aqua 5 µm C18 125 Å packing material	Phenomenex	04A-4299	
Centrifuge	Eppendorf	022625501	
Delicate Task Wipers	Fisher Scientific	06-666A	
Dithiothreitol (DTT)	AmericanBio	AB00490-00005	
DMSO, Anhydrous	Invitrogen	D12345	
EX350 excimer laser	GAM Laser	EX350 excimer laser	
FEP Tubing 1/16" OD x 0.020" ID	IDEX Health & Science	1548L	
Formic Acid, LC/MS Grade	Fisher Scientific	A117-50	
HV3-2 VALVE	Hamilton	86728	
Hydrogen Peroxide	Fisher Scientific	H325-100	any 30% hydrogen peroxide is sufficient
Iodoacetamide (IAA)	ACROS Organics	122270050	
Legato 210 syringe pump	KD Scientific	788212	Any syringe pump that can hold 4, 5 mL syringes, withdraw and expel liquid, and have a way to stall the motor should work
Luer Adapter Female Luer to 1/4-28 Male Polypropylene	IDEX Health & Science	P-618L	
Methanol, LC/MS Grade	Fisher Scientific	A454SK-4	4 L quantity is not necessary
Microcentrifuge	Thermo Scientific	75002436	
N,N'-Dimethylthiourea (DMTU)	ACROS Organics	116891000	

NanoTight Sleeve Green 1/16" ID x .0155" ID x 1.6"	IDEX Health & Science	F-242X	
NanoTight Sleeve Yellow 1/16" OD x 0.027" ID x 1.6"	IDEX Health & Science	F-246	
N-tert-Butyl- α -phenylnitron (PBN)	ACROS Organics	177350250	
Orbitrap Fusion Lumos Tribrid Mass Spectrometer	Thermo Scientific	Orbitrap Fusion Lumos Tribrid Mass Spectrometer	other high resolution instruments (e.g. Q exactive Orbitrap or Orbitrap Fusion) can be used
PE50-C pyroelectric energy meter	Ophir Optronics	7Z02936	
Pierce Quantitative Colorimetric Peptide Assay	Thermo Scientific	23275	
Pierce Rapid Gold BCA Protein Assay Kit	Thermo Scientific	A53225	
Pierce Trypsin Protease, MS Grade	Thermo Scientific	90058	
Pierce Universal Nuclease for Cell Lysis	Fisher Scientific	88702	
Polymicro Cleaving Stone, 1" x 1" x 1/32"	Molex	1068680064	any capillary tubing cutter is sufficient
Polymicro Flexible Fused Silica Capillary Tubing, Inner Diameter 150 μ m, Outer Diameter 360 μ m, TSP150350	Polymicro Technologies	1068150024	
Polymicro Flexible Fused Silica Capillary Tubing, Inner Diameter 450 μ m, Outer Diameter 670 μ m, TSP450670	Polymicro Technologies	1068150025	
Polymicro Flexible Fused Silica Capillary Tubing, Inner Diameter 75 μ m, Outer Diameter 360 μ m, TSP075375	Polymicro Technologies	1068150019	
Potassium Phosphate Monobasic	Fisher Scientific	P382-500	
Proteome Discover 2.2 (bottom-up proteomics software)	Thermo Scientific	OPTON-30799	
Rotary Magnetic Tumble Stirrer	V&P Scientific, Inc.	VP 710D3	
Rotary Magnetic Tumble Stirrer, accessory kit for use with Syringe Pumps	V&P Scientific, Inc.	VP 710D3-4	
Super Flangeless Ferrule w/SST Ring, Tefzel™ (ETFE), 1/4-28 Flat-Bottom, for 1/16" OD	IDEX Health & Science	P-259X	
Super Flangeless Nut PEEK 1/4-28 Flat-Bottom, for 1/16" & 1/32" OD	IDEX Health & Science	P-255X	
Super Tumble Stir Discs, 3.35 mm diameter, 0.61 mm thick	V&P Scientific, Inc.	VP 722F	
Thermo Scientific Pierce RIPA Buffer	Fisher Scientific	PI89900	
Tris Base	Fisher Scientific	BP152-500	
Upchurch Scientific Low-Pressure Crosses: PEEK	Fisher Scientific	05-700-182	
Upchurch Scientific Low-Pressure Tees: PEEK	Fisher Scientific	05-700-178	
UV Fused Silica Plano-Convex Spherical Lenses	THORLABS	LA4052	

V&P Scientific IncSupplier Diversity Partner TUMBL STIR DISC PARYLENE 1000	V&P Scientific, Inc.	VP724F	
VHP MicroTight Union for 360µm OD	IDEX Health & Science	UH-436	
Water with 0.1% Formic Acid (v/v), LC/MS Grade	Fisher Scientific	LS118-500	
Water, LC/MS Grade	Fisher Scientific	W6-4	