

Materials List for

Cell-Lineage Guided Mass Spectrometry Proteomics in the Developing (Frog) Embryo

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jove.com/video/63586

Materials

Name	Company	Catalog Number	Comments
Acetonitrile (LC-MS-grade)	Fisher Scientific	A955	
Agarose	ThermoFisher Scientific	R0492	
Ammonium bicarbonate	Fisher Scientific	A643-500	
Analytical Column	Thermo Scientific	164941	
Analytical microbalance	Mettler-Toledo	XSE105DU	
Automatic peptide fractionation platform	Agilent	1260 Infinity II	
Borosilicate Capillaries	Sutter Instruments Co.	B100-50-10	
Borosilicate Capillaries (for making Emitters)	Sutter Instruments	B100-75-10	
C18 spin columns (for desalting)	ThermoFisher Scientific	89870	
Camera to monitor electrospray	Edmund Optics Inc.	EO-2018C	
Combretastatin A4	Millipore Sigma	C7744	
Commercial CESI system	AB SCIEX	CESI	
(Cyclohexylamino)-1-propanesulfonic acid (CAPS)	VWR	97061-492	
Cytochalasin D	Millipore Sigma	C8273	
Dextran, Alexa Fluor 488; 10,000 MW, Anionic, Fixable	ThermoFisher Scientific	D22910	
Diothiothreitol	Fisher Scientific	FERR0861	
Dumont #5 Forceps	Fine Science Tools	11252-30	
EDTA	Fisher Scientific	AAJ62786AP	
Epifluorescence light source	Lumencore	AURA III	
Eppendorf LoBing microcentrifuge tubes: protein	Fisher Scientific	13-698-793	
Formic acid (LC-MS-grade)	Fisher Scientific	A117-50	
Freezer (-20 °C)	Fisher Scientific	97-926-1	
Freezer (-80 °C)	Thermo Scientific	TSX40086A	
Fused silica capillary	Molex	1088150596	
Heat Block	Benchmark	BSH300	

High pressure liquid Chromatography System	ThermoFisher Scientific	Dionex Ultimate 3000 RSLC nanosystem	
High voltage power supply	Spellman	CZE1000R	
High-resolution Mass Spectrometer	ThermoFisher Scientific	Orbitrap Fusion Lumos Tribrid Mass Spectrometer	
HPLC caps	Thermo Scientific	C4013-40A	
HPLC Vials	Thermo Scientific	C4013-11	
Illuminator e.g. Goosenecks	Nikon	C-FLED2	
Ingenuity Pathway Analysis	Qiagen		
Iodoacetamide	Fisher Scientific	AC122275000	
Methanol (LC-MS-grade)	Fisher Scientific	A456	
Methanol (LC-MS-grade)	Fisher Scientific	A456-4	
Microcapillary puller	Sutter Instruments	P-2000	
Microinjector	Warner Instrument, Handem, CT	PLI-100A	
Micropipette puller	Sutter Instruments Co.	P-1000	
MS data analysis software, commercial	ProteomeDiscoverer		
MS data analysis software, opensource	MaxQuant		
non-idet 40 substitute	Millipore Sigma	11754599001	
Petri dish 60 mm and 80 mm	Fisher Scientific	S08184	
Pierce 10 µL bed Zip-tips (for desalting)	ThermoFisher Scientific	87782	
Pierce bicinchoninic acid protein assay kit	ThermoFisher Scientific	23225	
Pierce quantitative colorimetric peptide assay	ThermoFisher Scientific	23275	
Pierce Trypsin Protease (MS Grade)	Fisher Scientific	PI90058	
Protein LoBind vials	Eppendorf	0030108434 , 0030108442	
Refrigerated Centrifuge	Eppendorf	5430R	
Refrigerated Incubator	Thermo Scientific	PR505755R/3721	
sodium isethionate	Millipore Sigma	220078	
sodium pyrophosphate	Sigma Aldrich	221368-100G	
Stainless steel BGE vial	Custom-Built		
Stainless steel sample vials	Custom-Built		
Stereomicroscope (objective 10x)	Nikon	SMZ 1270, SZX18	
Sucrose	VWR	97063-790	
Syringe pumps (2)	Harvard Apparatus	704506	
Syringes (gas-tight): 500–1000 µL	Hamilton	1750TTL	
Transfer pipettes (Plastic, disposable)	Fisher Scientific	13-711-7M	
Trap Column	Thermo Scientific	164750	
Tris-HCl (1 M solution)	Fisher Scientific	AAJ22638AP	
Vacuum concentrator capable of operation at 4–10 °C	Labconco	7310022	
Vortex-mixer	Benchmark	BS-VM-1000	
Water (LC-MS-grade)	Fisher Scientific	W6	
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XYZ translation stage	Thorlabs	PT3	

XYZ translation stage	Custom-Built		
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