

Materials List for:

Characterizing Histone Post-translational Modification Alterations in Yeast Neurodegenerative Proteinopathy Models

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URL: <https://www.jove.com/video/59104>

DOI: [doi:10.3791/59104](https://doi.org/10.3791/59104)

Materials

Name	Company	Catalog Number	Comments
-His DO Supplement	Clontech	630415	
10x Running Buffer			Mix: 141.65 g glycine (ThermoFisher BP381-1), 30.3 g Tizma base (Sigma-Aldrich T6066), 10 g sodium dodecyl sulfate (Sigma-Aldrich L3771), and 1 L deionized water, pH 8.8.
12% Polyacrylamide Gels	BIO-RAD	456-1041	
2-mercaptoethanol	Sigma-Aldrich	M3148	
Anti-acetyl-Histone H3 (Lys14) Primary Antibody	MilliporeSigma	07-353 (Lot No. 2762291)	Dilution: 1/1000
Anti-acetyl-Histone H4 (Lys 16) Primary Antibody	Abcam	ab109463 (Lot No. GR187780)	Dilution: 1/2000
Anti-acetyl-Histone H4 (Lys12) Primary Antibody	Abcam	ab46983 (Lot No. GR71882)	Dilution: 1/5000
Anti-dimethyl-Histone H3 (Lys36) Primary Antibody	Abcam	ab9049 (Lot No. GR266894, GR3236147)	Dilution: 1/1000
Anti-Histone H3 Primary Antibody	Abcam	ab24834 (Lot No. GR236539, GR174196, GR3194335)	Nuclear Loading Control; Dilution: 1/2000
Anti-phospho-Histone H2B (Thr129) Primary Antibody	Abcam	ab188292 (Lot No. GR211874)	Dilution: 1/1000
Anti-phospho-Histone H3 (Ser10) Primary Antibody	Abcam	ab5176 (Lot No. GR264582, GR192662, GR3217296)	Dilution: 1/1000
BioPhotometer D30	Eppendorf	6133000010	
Cell Culture Dish (100 x 20 mm)	Eppendorf	30702118	
Cell Culture Plate, 96 well	Eppendorf	30730011	
Centrifuge 5804/5804 R/5810/5810 R	Eppendorf	22625501	
Donkey Anti-Mouse IRDye 800 CW	LI-COR	926-32212 (Lot No. C60301-05, C61116-02, C80108-05)	Dilution: 1/5000
Donkey Anti-Rabbit IRDye 860 RD	LI-COR	926-68073 (Lot No. C60217-06, C70323-06, C70601-05, C80116-07)	Dilution: 1/2500
Ethanol	Sigma-Aldrich	E7023	
Extra thick blot paper (filter paper)	BIO-RAD	1703968	
Galactose	Sigma-Aldrich	G0750	Prepare 20% w/v stock solution.
Glucose	Sigma-Aldrich	G8270	Prepare 20% w/v stock solution.

Glycerol	Sigma-Aldrich	G5516	Prepare 50 % w/v solution.
Immobilon-FL Transfer Membranes	MilliporeSigma	IPFL00010	
Lithium acetate dihydrate (LiAc)	Sigma-Aldrich	L4158	Prepare a 1 M solution.
Loading Dye			Mix: 1.2 g sodium dodecyl sulfate, 6 mg bromophenol blue (Sigma-Aldrich B8026), 4.7 mL glycerol, 1.2 mL 0.5M Trizma base pH 6.8, 0.93 g DL-Dithiothreitol (Sigma-Aldrich D0632), and 2.1 mL deionized water.
Methanol	ThermoFisher	A412-4	
Mini-PROTEAN Tetra Vertical Electrophoresis Cell	BIO-RAD	1658004	
Multichannel pipet	Eppendorf	2231300045	
NEB Restriction Enzyme Buffer 2.1, 10x	New England Bio Labs	102855-152	
Nhe I Restriction Enzyme	New England Bio Labs	101228-710	
Nuclease Free Water	Qiagen	129114	
Odyssey Fc Imaging System	LI-COR Biosciences	2800-03	
OmniTray Cell Culture Treated w/ Lid Sterile, PS (86 x 128 mm)	ThermoFisher	165218	
pAG303GAL-a-synuclein-GFP	Gift from A. Gitler		
pAG303GAL-ccdB	Addgene	14133	
pAG303Gal-FUS	Addgene	29614	
pAG303GAL-TDP-43	Gift from A. Gitler		
Poly(ethylene glycol) (PEG)	Sigma-Aldrich	P4338	Prepare a 50% w/v solution.
Ponceau S Stain	Sigma-Aldrich	P3504	Mix: 0.5 g 0.1% w/w Ponceau S dye, 5 mL 1% v/v acetic acid (Sigma-Aldrich 320099), and 500 mL deionized water.
PowerPac Basic Power Supply	BIO-RAD	164-5050	
Raffinose pentahydrate	Sigma-Aldrich	R7630	Prepare 10% w/v stock solution.
Salmon Sperm DNA	Agilent Tech	201190	
SD-His plates			Mix: 20 g Agar (Sigma-Aldrich A1296), 0.77 g -His DO supplement, 6.7 g yeast Nitrogen Base w/o amino acids (ThermoFisher 291920), and 900 mL deionized water.
SGal-His plates			Mix: 20 g Agar, 0.77 g -His DO supplement, 6.7 g yeast Nitrogen Base w/o amino acids, 100 mL galactose solution, and 900 mL deionized water.
Sodium dodecyl sulfate Loading Buffer			Store at -20 oC. 6X, Mix: 1.2 g sodium dodecyl sulfate, 6 mg bromophenol blue, 0.93 g DL-Dithiothreitol, 2.1 mL deionized water, 4.7 mL glycerol, and 1.2 mL 0.5 M Trizma base, pH 6.8.
Sodium hydroxide	Sigma-Aldrich	221465	Prepare 0.2 M solution.
Sucrose	Sigma-Aldrich	84097	Prepare 20% w/v stock solution.
TBS + 0.1% Tween 20 (TBST)			Mix: 100 mL 10X TBS, 1 mL Tween 20 (Sigma-Aldrich P7949), and 900 mL deionized water.

TBS Blocking Buffer	LI-COR	927-5000	
Trans-Blot SD Semi-Dry Electrophoretic Transfer Cell	BIO-RAD	170-3940	
Transfer Buffer			Mix: 22.5 g glycine, 4.84 g Trizma base, 400 mL methanol, 1 g sodium dodecyl sulfate, and 1.6 L deionized water.
Tris-Buffered Saline (TBS)			10X, 7.6 pH, Solution: Mix 24 g Trizma base, and 88 g sodium chloride (Sigma-Aldrich S7653). Fill to 1 L with deionized water.
WT 303 <i>S. cerevisiae</i> yeast	Gift from J. Shorter		
Yeast Extract Peptone Dextrose (YPD)	Sigma-Aldrich	Y1375	