

Quantification of Insoluble Protein Aggregation in *Caenorhabditis elegans* during Aging with a Novel Data-Independent Acquisition Workflow

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Materials

Name	Company	Catalog Number	Comments
Strains used			
Eshcherichia coli OP50	Caenorhabditis Genetics Center (CGC)		
N2 (Bristol)	Caenorhabditis Genetics Center (CGC)		
Buffer/Solution			
NGM (Nematode Growth Media)			Recipe: 3 g/L NaCl, 23 g/L agar; 2.5 g/L peptone; 1 mM CaCl ₂ , 5 mg/L cholesterol, 1 mM MgSO ₄ , 25 mM KH ₂ PO ₄
S-basal solution			Recipe: 5.85 g/L NaCl, 1g/L K ₂ HPO ₄ , 6 g/L KH ₂ PO ₄ , H ₂ O to 1 L
Sodium hypochlorite bleach solution			Recipe: Mix 0.5 mL 5 N NaOH with 1 ml Sodium hypochlorite (5%) and make volume to 5 mL with H ₂ O.
Material/ Equipment			
Agar	Difco Granulated Agar, BD Biosciences	90000-782	
Bioruptor Plus sonication device	Diagenode, USA	B01020001	
Cholesterol	Sigma	c8503	
2'-deoxy-5-fluorouridine	VWR	TCD2235	
Glycerol	Millipore Sigma	356350-1000ML	
LB broth, Miller	Millipore Sigma	60801-450	
Sodium dodecyl sulfate (SDS?)	Sigma	L4509-250G	
Sodium chloride	Sigma	59888	

M880 Ultrasonic bath, 117 V, holds 5.5 gallons	VWR, USA	89375-458	
Magnesium sulphate	Sigma	M506	
Magnesium chloride	Sigma	208337	
NGM agar plate	VWR Disposable Petri Dishes	25384-342	
NuPAGE LDS Sample Buffer (4X)	Thermo Fisher Scientific	NP0007	
NuPAGE protein gels, 4-12%	Invitrogen	NP 0335BOX	
Protease inhibitor cocktail (PIC)	Roche	11836170001	
Pierce BCA Assay	Thermo Fisher Scientific	23225	
Sodium hypochlorite 5%	VWR	JT9416-1	
SYPRO Ruby Protein Gel Stain	Thermo Fisher Scientific	S12000	
MS Section			
Acetonitrile, Burdick and Jackson LC-MS	Honeywell International Inc., Charlotte, NC, USA	36XL66	
Agilent Zorbax 300Extend C18 column	Agilent Technologies Inc., Santa Clara, CA, USA	770995-902	
Ammonium bicarbonate	Sigma Aldrich, St. Louis, MO, USA	9830 (1 kg)	
Dithiothreitol (DTT)	Sigma Aldrich, St. Louis, MO, USA	D9779-5G	
Eppendorf Thermomixer Compact	Eppendorf AG, Hamburg, Germany	T1317-1EA	
Formic acid	Sigma Aldrich, St. Louis, MO, USA	F0507-500ML	
Indexed retention time (iRT) normalization peptide standard	Biognosys AG, Schlieren, Zurich, Switzerland	Ki-3002-2	
Iodoacetamide (IAA)	Sigma Aldrich, St. Louis, MO, USA	I1149-25G	
Methanol, HPLC Grade	Honeywell International Inc., Charlotte, NC, USA	34885	
Nano cHiPLC Trap ChromXP C18-CL, 200 um x 6 mm, 3 um, 120A. (pre-column chip) (200 um x 6 mm ChromXP C18-CL chip, 3 um, 300 A)	Sciex LLC, Framingham, MA, USA	804-00006	
Nano cHiPLC ChromXP 75 um by 15cm, C18-CL, 3 um, 120 A (analytical column chip)	Sciex LLC, Framingham, MA, USA	804-00001	
Orthogonal quadrupole time-of-flight (QqTOF) TripleTOP 6600 mass spectrometer	Sciex LLC, Framingham, MA, USA	Per quote	
ProteinPilot 5.0	Sciex LLC, Framingham, MA, USA	software download Sciex	
Savant SPD131DDA Speedvac Concentrator	Thermo Fisher Scientific, Waltham, MA, USA	SPD131DDA-115	
Sequencing-grade lyophilized trypsin	Life Technologies	23225	
Spectronaut	Biognosys AG, Schlieren, Zurich, Switzerland	Sw-3001	
SWATH 2.0 plugin into PeakView 2.2	Sciex LLC, Framingham, MA, USA	software download Sciex	
Ultra Plus nano-LC 2D HPLC system	Sciex LLC, Eksigent Division, Framingham, MA, USA	Model # 845	
Water, Burdick and Jackson LC-MS	Honeywell International Inc., Charlotte, NC, USA	600-30-76	
Waters 1525 binary HPLC pump system	Waters Corp., Milford, MA, USA	WAT022939	
Waters 2487 Dual Wavelength UV detector	Waters Corp., Milford, MA, USA	WAT081110	
Waters 717plus Autosampler	Waters Corp., Milford, MA, USA	WAT022939	
Waters Fraction Collector III	Waters Corp., Milford, MA, USA	186001878	