

# Extraction and Visualization of Protein Aggregates after Treatment of *Escherichia coli* with a Proteotoxic Stressor

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jove.com/video/62628

## Materials

Name	Company	Catalog Number	Comments
<b>Chemicals/Reagents</b>			
Acetone	Fisher Scientific	67-64-1	
30% Acrylamide/Bisacrylamide solution 29:1	Bio-Rad	1610156	
Ammonium persulfate	Millipore Sigma	A3678-100G	
Benzonase nuclease	Sigma	E1014-5KU	
Bluestain 2 Protein ladder, 5-245 kDa	GoldBio	P008-500	
β-mercaptoethanol	Millipore Sigma	M6250-100ML	
Bromophenol blue	GoldBio	B-092-25	
Coomassie Brilliant Blue R-250	MP Biomedicals LLC	821616	
D-Glucose	Millipore Sigma	G8270-1KG	
D-Sucrose	Acros Organics	57-50-1	
Ethylenediamine tetra acetic acid (EDTA)	Sigma-Aldrich	SLBT9686	
Glacial Acetic acid	Millipore Sigma	ARK2183-1L	
Glycerol, 99%	Sigma-Aldrich	G5516-1L	
Glycine	GoldBio	G-630-1	
Hydrochloric acid, ACS reagent	Sigma-Aldrich	320331-2.5L	
Isopropanol (2-Propanol)	Sigma	402893-2.5L	
LB broth (Miller)	Millipore Sigma	L3522-1KG	
LB broth with agar (Miller)	Millipore Sigma	L2897-1KG	
Lysozyme	GoldBio	L-040-25	
10x MOPS Buffer	Teknova	M2101	
Nonidet P-40	Thomas Scientific	9036-19-5	
Potassium phosphate, dibasic	Sigma-Aldrich	P3786-1KG	
Potassium phosphate, monobasic	Acros Organics	7778-77-0	
Sodium dodecyl sulfate (SDS)	Sigma-Aldrich	L3771-500G	

Tetramethylethylenediamine (TEMED)	Millipore Sigma	T9281-50ML	
Thiamine	Sigma-Aldrich	T4625-100G	
100% Trichloroacetic acid	Millipore Sigma	T6399-100G	
Tris base	GoldBio	T-400-1	
<b>Material/Equipment</b>			
Centrifuge tubes (15 mL)	Alkali Scientific	JABG-1019	
Erlenmeyer flask (125 mL)	Carolina	726686	
Erlenmeyer flask (500 mL)	Carolina	726694	
Freezer: -80 °C	Fisher Scientific		
Glass beads (0.5 mm)	BioSpec Products	1107-9105	
Microcentrifuge	Hermle	Z216MK	
Microcentrifuge tubes (1.7 mL)	VWR International	87003-294	
Microcentrifuge tubes (2.0 mL)	Axygen Maxiclear Microtubes	MCT-200-C	
Plastic cuvettes	Fischer Scientific	14-377-012	
Power supply	ThermoFisher Scientific	EC105	
Rocker	Alkali Scientific	RS7235	
Shaking incubator (37 °C)	Benchmark Scientific		
Small glass plate	Bio-Rad	1653311	
Spacer plates (1 mm)	Bio-Rad	1653308	
Spectrophotometer	Thermoscientific	3339053	
Tabletop centrifuge for 15 mL centrifuge tubes	Beckman-Coulter		
Vertical gel electrophoresis chamber	Bio-Rad	1658004	
Vortexer	Fisher Vortex Genie 2	12-812	
Thermomixer	Benchmark Scientific	H5000-HC	
10 well comb	Bio-Rad	1653359	