

Materials List for:

# Polysome Fractionation and Analysis of Mammalian Translatomes on a Genome-wide Scale

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URL: <https://www.jove.com/video/51455>

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## Materials

Name	Company	Catalog Number	Comments
HEPES	Biobasic	HB0264	
MgCl <sub>2</sub>	Sigma	M8266	
KCl	VWR	CABDH4532	
Dithiothreitol (DTT)	Biobasic	DB0058	
Tris	Biobasic	TB0196	
Glycoblue	Ambion	AM9515	RNA precipitation carrier
Sodium Deoxycholate	Sigma	D6750	
Triton X-100	Sigma	X100	
Cycloheximide	Sigma	C1988	
Protease inhibitor cocktail	Roche	04693132001	Tablets (EDTA-free)
RNase inhibitor	Promega	N2515	
0.45 µm Filter System 150 ml	Corning	431155	
Sucrose	Sigma	S0389	
RNeasy MinElute Cleanup kit	Qiagen	74204	RNA cleanup kit
Thin wall polyallomer ultracentrifuge tubes	Beckman Coulter	331372	
SW41Ti Rotor Package with accessories	Beckman Coulter	331336	
Optima L100 XP ultra centrifuge	Beckman Coulter	DS-9340A	
ISCO fraction collector	Brandel	FC-176-R1	
Type II Detector with Chart Recorder	Brandel	UA-6	UV detector
Tube Piercer w/Flow Cell and Syringe Pump	Brandel	BR-A86-5	
UA-6 Detector Cable	Brandel	60-1020-211	
FC-176 Communication Cable	Brandel	FCC-176	
Gradient Master Base Unit	Biocomp	108-1	Gradient Maker
Gradient Forming Attachments	Biocomp	105-914A-1R	Gradient Maker attachment
Measurement Computing 8-channel 50 kHz Data Acquisition Device	MicroDAQ	USB-1208FS	Analysis software attachment
Measurement Computing Data Acquisition Software	MicroDAQ	TracerDAQ Pro	Analysis software (Download only)
10x buffer for sucrose gradients:			
200 mM HEPES (pH7.6)			

1 M KCl			
50 mM MgCl <sub>2</sub>			
100 µg/ml cycloheximide			
1x protease inhibitor cocktail (EDTA-free)			
100 units/ml RNase inhibitor			
Lysis buffer			
5 mM Tris-HCl (pH7.5)			
2.5 mM MgCl <sub>2</sub>			
1.5 mM KCl			
1x protease inhibitor cocktail (EDTA-free)]			
Then add cycloheximide (CHX), DTT, RNase inhibitor, Triton and Sodium Deoxycholate as indicated in the main text			