

Materials List for:

Assessment of Selective mRNA Translation in Mammalian Cells by Polysome Profiling

Mame Daro Faye¹, Tyson E Graber², Martin Holcik³

¹Apoptosis Research Centre, Children's Hospital of Eastern Ontario Research Institute and Department of Biochemistry, Microbiology and Immunology, University of Ottawa

²Montreal Neurological Institute

³Apoptosis Research Centre, Children's Hospital of Eastern Ontario Research Institute and Department of Pediatrics, University of Ottawa

Correspondence to: Martin Holcik at martin@arc.cheo.ca

URL: <https://www.jove.com/video/52295>

DOI: [doi:10.3791/52295](https://doi.org/10.3791/52295)

Materials

Name	Company	Catalog Number	Comments
Gradient Master 108 automated gradient maker	BIOCOMP	107-201M	
Auto Densi-Flow two-chamber gradient maker	LABCONCO	4517000	
Beckman Ultracentrifuge	Beckman Coulter	Model # L-100-XP	
Density gradient fractionator	TELEDYNE ISCO	69-3873-246	Composed of: tube piercing system, peristaltic pump, UA-6 Detector with 254 and 280 nm filters and Foxy R1 Fraction Collector
WinDaq data acquisition software	DATAQ INSTRUMENTS	WINDAQ/LITE	http://www.dataq.com/products/software/acquisition.htm
Pollyallomer ultracentrifuge tubes (for SW41, 14 x 89 mm)	Beckman Coulter	331372	
Nuclease-free 2-ml centrifuge tubes (dolphin nose)	DiaMed	PRE1900-N	
Nuclease-free 2-ml centrifuge tubes (flat bottom)	SafeSeal	12000	
Sucrose (nucleases-free)	Calbiochem	573113	MW = 342.3 g/mol
Cycloheximide	SIGMA	C7698	MW = 281.4 g/mol. Resuspend in DMSO and keep at -80C for long term storage. Caution: TOXIC! Can cause respiratory tracts and skin irritation. Wear mask when weighing.
Sodium chloride (nucleases-free)	OmniPur	7710	MW = 58.44 g/mol
MgCl ₂ ·6H ₂ O (nucleases-free)	OmniPur	5980	MW = 203.3 g/mol
Tris Base (nucleases-free)	J.T. Baker	4109-01	MW = 121.14 g/mol
Triton X-100	OmniPur	9400	Caution: TOXIC! Can cause respiratory tracts and skin irritation
Recombinant RNasin Ribonuclease Inhibitor	Promega	N2515	
RNaseZap RNase inactivation solution	Ambion, Life Technologies	AM9780	
GlycoBlue Coprecipitant (15 mg/ml)	Invitrogen, Life Technologies	AM9516	

Acid-Phenol:Chloroform, pH 4.5 (with IAA, 125:24:1)	Ambion, Life Technologies	AM9722	Caution: TOXIC ! Can cause respiratory tracts irritation as well as skin irritation and corrosion
--	---------------------------	--------	---