

Cell-type Specific Protein Purification and Identification from Complex Tissues using a Mutant Methionine tRNA Synthetase Mouse Line

Belquis Nassim-Assir¹, Daniel Ouro Corredera², Rodrigo Alvarez-Pardo², Susanne tom Dieck¹, Elena Ciirdaeva¹, Erin M. Schuman¹, Beatriz Alvarez-Castelao²

¹Max-Planck-Institute for Brain Research, Synaptic Plasticity Department ²Department of Biochemistry and Molecular Biology, Veterinary School, Complutense University of Madrid

Corresponding Authors

Erin M. Schuman
erin.schuman@brain.mpg.de

Beatriz Alvarez-Castelao
balvar03@ucm.es

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jove.com/video/63713

Materials

Name	Company	Catalog Number	Comments
12% Acrylamide gels	GenScript	SurePAGE, Bis-Tris, 10 x 8, 12%	
β-Mercaptoethanol	Sigma	M6250	Toxic; use a lab coat, gloves and a fume hood.
Ammonium bicarbonate	Sigma	9830	Toxic; use a lab coat, gloves and a fume hood
ANL			Synthesized as described previously for AHA (see references 5 and 11)
ANL-HCl	IrishBotech	HAA1625.0500	
Benzonase	Sigma	E1014	
Biotin alkyne	Thermo,	B10185	
Chicken antibody anti-GFP	Aves	1020	
Complete EDTA-free protease inhibitor	Roche	4693132001	Toxic; use a lab coat and gloves.
Copper (I) bromide	Sigma	254185	99.999% (wt/wt)
Disulfide tag (DST)-alkyne			Synthesized as reported in reference number 15, in which it is referred to as probe 20
DMSO	Sigma	276855	
Filters	Merk	SCGP00525	
Iodo acetamide (IAA)	Sigma	I1149	
IR anti chicken 800	LI-COR	IRDye 800CW	Donkey anti-Chicken Secondary Antibody
IR anti rabbit 680	LI-COR	IRDye 680RD	Goat anti-Rabbit IgG Secondary Antibody
Maltose	Sigma	M9171	
Manual Mixer	BioSpec Products	1083	

NaCl	Sigma	S9888	
N-ethylmaleimide	Sigma	4259	Toxic; use a lab coat, gloves and a fume hood.
NeutrAvidin beads	Pierce	29200	
Nitrocellulose membrane	Bio-rad	1620112	
PBS 1X	Thermo	J62036.K2	
PBS 1X pH 7.8			Preparation described in reference number 5
PD SpinTrap G-25 columns	GE Healthcare		Buffer exchange
Pierce BCA Protein Assay Kit	Thermo,	23225	Reagents in the Pierce BCA Protein Assay Kit are toxic to aquatic life.
Polyclonal rabbit anti-biotin antibody	Cell Signaling	5597	
PVDF membrane	Millipore	IPVH00010	
SDS 10%	Sigma	71736	
SDS-PAGE Running buffer MOPS	GenScript	M00138	
SYPRO Ruby stain	Sigma	S4942	
Table automatic Vortexer	Eppendorf	Mixmate	
Triazole ligand	Sigma	678937	
Triton X-100	Sigma	T9284	
Water	Sigma	W4502	Molecular biology grade