

Materials List for:

PAR-CLIP - A Method to Identify Transcriptome-wide the Binding Sites of RNA Binding Proteins

Markus Hafner¹, Markus Landthaler², Lukas Burger³, Mohsen Khorshid³, Jean Hausser⁴, Philipp Berninger⁴, Andrea Rothballer¹, Manuel Ascano¹, Anna-Carina Jungkamp², Mathias Munschauer², Alexander Ulrich¹, Greg S. Wardle¹, Scott Dewell⁵, Mihaela Zavolan³, Thomas Tuschl¹

¹Howard Hughes Medical Institute, Laboratory of RNA Molecular Biology, Rockefeller University

²Berlin Institute for Medical Systems Biology, Max-Delbrück-Center for Molecular Medicine

³Biozentrum der Universität Basel and Swiss Institute of Bioinformatics (SIB)

⁴Biozentrum der Universität Basel and Swiss Institute of Bioinformatics (SIB)

⁵Genomics Resource Center, Rockefeller University

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Materials

Buffers and reagents
Growth medium HEK293 cells
• DMEM • 10% FBS • 2 mM L-Glutamine • 100 U/ml penicillin • 100 U/ml streptomycin • 100 µg/ml hygromycin • 15 µg/ml blasticidin
4-thiouridine stock solution (1 M)
• 260.27 mg 4-thiouridine • 1 ml DMSO
Doxycyclin stock (10 mg/ml)
• 10 mg doxycyclin • 1 ml DMSO
1x NP40 lysis buffer
Prepare a stock of 5x buffer without DTT and protease inhibitors. Add DTT and protease inhibitor directly before the experiment.
• 50 mM HEPES, pH 7.5 • 150 mM KCl • 2 mM EDTA • 1 mM NaF • 0.5% (v/v) NP40 • 0.5 mM DTT • complete EDTA-free protease inhibitor cocktail (Roche)
Citrate-Phosphate buffer
• 4.7 g/l citric acid • 9.2 g/l Na₂HPO₄ • pH 5.0
IP-wash buffer
• 50 mM HEPES-KOH, pH 7.5

• 300 mM KCl • 0.05% (v/v) NP40 • 0.5 mM DTT (add directly before experiment) • complete EDTA-free protease inhibitor cocktail (Roche) (add directly before experiment)
High-salt wash buffer
• 50 mM HEPES-KOH, pH 7.5 • 500 mM KCl • 0.05% (v/v) NP40 • 0.5 mM DTT (add directly before the experiment) • complete EDTA-free protease inhibitor cocktail (Roche) (add directly before the experiment)
Dephosphorylation buffer
• 50 mM Tris-HCl, pH 7.9 • 100 mM NaCl • 10 mM MgCl₂ • 1 mM DTT
Phosphatase wash buffer
• 50 mM Tris-HCl, pH 7.5 • 20 mM EGTA • 0.5% (v/v) NP40
Polynucleotide kinase (PNK) buffer without DTT
• 50 mM Tris-HCl, pH 7.5 • 50 mM NaCl • 10 mM MgCl₂
PNK buffer
• 50 mM Tris-HCl, pH 7.5 • 50 mM NaCl • 10 mM MgCl₂ • 5 mM DTT
SDS PAGE loading buffer
• 10% glycerol (v/v) • 50 mM Tris-HCl, pH 6.8 • 2 mM EDTA • 2% SDS (w/v) • 100 mM DTT • 0.1% bromophenol blue
2x Proteinase K buffer
• 100 mM Tris-HCl, pH 7.5 • 150 mM NaCl • 12.5 mM EDTA • 2% (w/v) SDS