

Materials List for:

Analysis of mRNA Nuclear Export Kinetics in Mammalian Cells by Microinjection

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Materials

| Name | Company | Catalog Number | Comments |
|--|-----------------------------------|----------------|---|
| Injection buffer | Sigma-Aldrich | | 140 mM KCl and 10 mM HEPES, pH 7.4 |
| Oregon Green 488-70kD Dextran | Invitrogen | D7173 | Stock of 10mg/ml in injection buffer can be stored for long periods of time at -80°C |
| Borosilicate capillary tubes | World Precision Instruments, Inc. | 1B100F-4 | |
| Gel loading pipette tips for loading injection needles | Eppendorf | 022351656 | |
| Microscope | Nikon Instruments | Eclipse Ti-S | |
| Micromanipulator | Narishige International | NT-88-V3MSH | |
| Syringe for injection | BD Biosciences | 512311 | |
| PBS Buffer | Sigma-Aldrich | | 137 mM NaCl, 2.7 mM KCl, 10 mM Na ₂ HPO ₄ , 2 mM KH ₂ PO ₄ , pH 7.4 |
| SSC Buffer | Sigma-Aldrich | | 150 mM NaCl, 15 mM sodium citrate, pH 7.4 |
| 4% Paraformaldehyde | Electron Microscopy Sciences | 15686 | Stock of 37% Paraformaldehyde is diluted in PBS |
| 0.1% Triton X-100 (Surfact-Amps) | Thermo Fisher Scientific, Inc. | 28314 | Stock of 10% Triton X-100 is diluted in PBS |
| Formamide | Fisher Scientific | F84-1 | |
| Dextran sulfate | Fisher Scientific | BP1585-100 | |
| <i>E. coli</i> tRNA | Sigma-Aldrich | R1753 | |
| Vanadyl riboside complex (VRC) | Sigma-Aldrich | R3380 | |
| Whatman filter paper | VWR international | 28298-020 | |
| Vibration control table | Kinetic Systems | 5702E-3036-21 | |
| Fluoromount G | SouthernBiotech | 0100-20 | |
| α-amanitin | Sigma-Aldrich | A2263 | |
| Parafilm | Fisher Scientific | 13-374-12 | |
| Flaming/Brown Micropipette Puller | Sutter Instrument Co. | P-97 | |
| Vacuum Grease | Dow Corning | 695400008 | |
| T7 RNA Polymerase | New England Biolabs | M0251S | |
| Poly(A) Polymerase | Ambion | AM1350 | |
| Hybridization Buffer | Sigma-Aldrich | | 100mg/ml dextran sulfate, 5mM VRC, 150mM NaCl, 15mM sodium citrate, 0.5mg/ml <i>E. coli</i> tRNA, 60% formamide |