

Materials List for:

# High-throughput Physical Mapping of Chromosomes using Automated *in situ* Hybridization

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URL: <https://www.jove.com/video/4007>

DOI: [doi:10.3791/4007](https://doi.org/10.3791/4007)

## Materials

Name	Company	Catalog Number	Comments
22x22 mm microscope coverslips	Fisher	12-544-10	
18x18 mm microscope coverslips	Fisher	12-553-402	
Acetic acid	Fisher	A491-212	
Methanol	Fisher	A412-4	
Propionic acid	Sigma-Aldrich	402907	
Dremel 200 rotary tool with a Flex-Shaft attachment	Rand		3" Multi-purpose Mini Bench Grinder (with rate limiter)
Specially designed 200 µl plastic tips (beaded plastic edges) for Dremel tool	Pipetman	F171300	Cut and heat fat end of pipet tips
Tin coated rapid vise	Avenger Gold Toolmaker	MTC-200-1	Precision ground square and parallel to within 0.00025
Torque wrench	Craftsman	44593	
ThermoBrite Slide Denaturation/ Hybridization System	Abbott Molecular	30-144110	
25 mm barrier slides	Abbott Molecular	XT108-SL	
25 mm coverslips	Abbott Molecular	XT122-90X	
Xmatrix Automated Slide Staining System	Abbott Molecular	08L46-001	
MZ6 Leica stereomicroscope	Leica	VA-OM-E194-354	A different stereomicroscope can be used
Olympus CX41 Phase Microscope	Olympus	CX41RF-5	A different phase microscope can be used
ACCORD PLUS Automated Scanning System	BioView (USA)	BV-5000-ACCP	
10x PBS	Invitrogen	P5493	
10% NBF (neutral buffered formalin)	Sigma-Aldrich	HT501128	
99% formamide	Fisher Scientific	BP227500	
Dextran sulfate sodium salt	Sigma	D8906	
20x SSC buffer	Invitrogen	AM9765	
Sodium phosphate	Sigma-Aldrich	S3264	
50x Denhardt's solution	Sigma-Aldrich	D2532	
Sodium azide	Sigma-Aldrich	S2002	
1 mM YOYO-1 iodide (491/509) solution in DMSO	Invitrogen	Y3601	
ProLong Gold antifade reagent	Invitrogen	P36930	
dATP, dCTP, dGTP, dTTP	Fermentas	R0141, R0151, R0161, R0171	

Cy3-dUTP, Cy5-dUTP	GE Healthcare	PA53022, PA55022	
BSA	Sigma	A3294	
DNA polymerase I	Fermentas	EP0041	
DNase I	Fermentas	EN0521	