

Materials List for:

In Situ Hybridization for the Precise Localization of Transcripts in Plants

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Materials

Name	Company	Catalog Number	Comments
Cytoseal 60 4oz	Fisher Scientific	23-244-256	Toluene-based 8310-4
Histoclear	Fisher Scientific	50-899-90147	
Tissue Path Paraplast Plus	Fisher Scientific	23-021-400	
N+ nylon membrane Hybond-N+	GE Healthcare	RPN203B	
RNase OUT; 40 U/μL	Invitrogen	10777019	
RQ1 RNase-Free DNase; 1 U/μl	Promega Corp.	M6101	
DIG-labeled Control RNA	Roche Group	11585746910	
DIG RNA labeling mix	Roche Group	11277073910	
SP6 RNA polymerase 1,000 U	Roche Group	10810274001	
T3 RNA polymerase 1,000 U	Roche Group	11031163001	
T7 RNA polymerase 1,000 U	Roche Group	10881767001	
RNase-A	Roche Group	109142	dissolve in glycerol 50% Tris 100mM pH8.0
Blocking Reagent	Roche Group	1 096 176	Heat up to 70°C in TBS buffer
Anti-Digoxigenin-AP, Fab fragments from sheep 150 U	Roche Group	1 093 274	
NBT/BCIP stock solution	Roche Group	1 681 451	
mini Quick Spin RNA Columns	Roche Group	11814427001	
tRNA from <i>E. coli</i>	Roche Group	109541	
Triton®X-100	Sigma-Aldrich	T8787	
Tween-20	Sigma-Aldrich	P9416	
Deionized formamide	Sigma-Aldrich	F9037	
Protease from <i>Streptomyces griseus</i> Type XIV	Sigma-Aldrich	P5147	Dilute in milliQ water and pre-digest 4 hours at 37°C
Triethanolamine	Sigma-Aldrich	90279	Dilute in water, bring to pH8.0 with HCl
Acetic anhydride	Sigma-Aldrich	A6404	
Dextran sulfate sodium salt from <i>Leuconostoc spp.</i>	Sigma-Aldrich	D8906-5G	Dextran Sulfate should be heated to 80°C to dissolve.
Denhardt's Solution 50x Concentrate	Sigma-Aldrich	D2532	
Albumin from bovine serum - ≥98%	Sigma-Aldrich	A7906	
Eosin Y disodium salt	Sigma-Aldrich	E4382	Dissolve in 96-100% ethanol until saturated
Paraformaldehyde	Sigma-Aldrich	P6148	
Ethanol absolute 200 proof			
Phenol/chloroform			
Base moulds	Electron Microscopy Sciences	62352-15	
Embedding rings	Fisher Scientific	22-038-197	

20ml disposable scintillation vials, with caps	VWR international	66020-326	
Probe-on-plus slides	Fisher Scientific	22-230-900	
Micro cover glasses 24x50 mm	VWR international	48404-452	
Whatman paper 3mm	VWR international	89022-360	
Three glass dishes and one stainless steel slide rack	Electron Microscopy Sciences	71420-25	Two glass dishes are necessary for histoclear treatment and the last one is used for the acetic anhydride treatment
18 clean plastic containers	Electron Microscopy Sciences	71402	
2 or 3 large flat plastic boxes with sealable lids			required for the hybridization and antibody steps
Fine brushes			Help handling wax ribbons
Microtome			Leica
Self-cleaning dry vacuum system	Welch Allyn	2025	
Slide warmer	Fisher Scientific		
Heating block			needed at 60°C and 85°C
Incubator at 58-60°C	Fisher Scientific		For steps with molten Paraplast
Ovens or water baths for 55°C and 37°C	Fisher Scientific		Need two due to the quick change between temperatures
Centrifuge (4°C - 20°C)			
Fume hood			