

Materials List for:

Localization of Odorant Receptor Genes in Locust Antennae by RNA *In Situ* Hybridization

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Materials

Name	Company	Catalog Number	Comments
Materials			
2×TSINGKE™ Master Mix	TSINGKE, China	TSE004	
RNase-free H ₂ O	TIANGEN, China	RT121-02	
REGULAR AGAROSE G-10	BIOWEST, SPAIN	91622	
Binding buffer	TIANGel Midi Purification Kit, TIANGEN, China	DP209-02	
Balance buffer	TIANGel Midi Purification Kit, TIANGEN, China	DP209-02	
Wash solution	TIANGel Midi Purification Kit, TIANGEN, China	DP209-02	
T Vector	Promega, USA	A362A	
T4 DNA Ligase	Promega, USA	M180A	
<i>Escherichia coli</i> DH5α	TIANGEN, China	CB101	
Ampicillin	Sigma, USA	A-6140	
Isopropyl β-D-1-thiogalactopyranoside	Inalco, USA	1758-1400	
5-bromo-4-chloro-3-indolyl-β-D-galactopyranoside	SBS Genetech, China	GX1-500	
<i>Nco</i> I	BioLabs, New England	R0193S	
<i>Spe</i> I	BioLabs, New England	R0133M	
DIG RNA Labeling Kit	Roche, Switzerland	11175025910	
Biotin RNA Labeling Kit	Roche, Switzerland	11685597910	
DNase	DIG RNA Labeling Kit, Roche, Switzerland	11175025910	
LiCl	Sinopharm, China	10012718	
Ethanol	Sinopharm, China	10009257	
Acetic acid	BEIJING CHEMICAL REAGENTS COMPANY, China	10000292	
Tissue-Tek O.C.T. Compound	Sakura Finetek Europe, Zoeterwoude, Netherlands	4583	
Slides	TINA JIN HAO YANG BIOLOGICAL MANUFACTURE CO., LTD, China	FISH0010	
HCl	Sinopharm, China	80070591	
Millex	Millipore, USA	SLGP033RS	
Tween 20	AMRESCO, USA	0777-500ML	

Nitroblue tetrazolium chloride / 5-bromo-4-chloro-3-indolyl-phosphate toluidine salt	Roche, Switzerland	11175041910	
Glycerol	Sinopharm, China	10010618	
Name	Company	Catalog Number	Comments
Solutions			
1×Tris-acetate-EDTA	Sigma, USA	V900483-1KG	0.04 mol/L Tris-Base
1×Tris-acetate-EDTA	BEIJING CHEMICAL REAGENTS COMPANY, China	10000292	0.12% acetic acid
1×Tris-acetate-EDTA	Sigma, USA	03677	Ethylenediaminetetraacetic acid disodium salt (EDTA)
Luria-Bertani (LB) liquid medium	Sinopharm, China	10019392	10 g/L NaCl
Luria-Bertani (LB) liquid medium	MERCK, Germany	VM335231	10 g/L Peptone from casein (Tryptone)
Luria-Bertani (LB) liquid medium	MERCK, Germany	VM361526	5 g/L Yeast extract
LB solid substrate plate	Sinopharm, China	10019392	10 g/L NaCl
LB solid substrate plate	MERCK, Germany	VM335231	10 g/L Peptone from casein (Tryptone)
LB solid substrate plate	MERCK, Germany	VM361526	5 g/L Yeast extract
LB solid substrate plate	WISSENT ING, Canada	800-010-CG	15 g/L Agar Bacteriological Grade
10×Phosphate-Buffered Saline (PBS, pH 7.1)	Sinopharm, China	10019392	8.5% NaCl
10×Phosphate-Buffered Saline (PBS, pH 7.1)	Sigma, USA	V900041-500G	14 mM KH_2PO_4
10×Phosphate-Buffered Saline (PBS, pH 7.1)	Sigma, USA	V900268-500G	80 mM Na_2HPO_4
10×Tris-Buffered Saline (TBS, pH 7.5)	Sigma, USA	V900483-1KG	1 M Tris-Base
10×Tris-Buffered Saline (TBS, pH 7.5)	Sinopharm, China	10019392	1.5 M NaCl
Detection Buffer (DAP) chromogenic detection pH 9.5 TSA detection pH 8.0	Sigma, USA	V900483-1KG	100 mM Tris-Base
Detection Buffer (DAP) chromogenic detection pH 9.5 TSA detection pH 8.0	Sinopharm, China	10019392	100 mM NaCl
Detection Buffer (DAP) chromogenic detection pH 9.5 TSA detection pH 8.0	Sigma, USA	V900020-500G	50 mM $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$
20×saline-sodium citrate (pH 7.0)	Sinopharm, China	10019392	3 M NaCl
20×saline-sodium citrate (pH 7.0)	Sigma, USA	V900095-500G	0.3 M Na-Citrate
4% paraformaldehyde solution (PFA, pH 9.5)	Sigma, USA	V900894-100G	4% paraformaldehyde
Sodium Carbonate Buffer	Sigma, USA	V900182-500G	0.1 M NaHCO_3
Sodium Carbonate Buffer (pH 10.2)	Sigma, USA	V900182-500G	80 mM NaHCO_3
Sodium Carbonate Buffer (pH 10.2)	Sigma, USA	S7795-500G	120 mM Na_2CO_3
Formamide Solution (pH 10.2)	MPBIO, USA	FORMD002	50% Deionized Formamide
Formamide Solution (pH 10.2)			5×saline-sodium citrate
Blocking Buffer in TBS	Roche, Switzerland	11175041910	1% Blot
Blocking Buffer in TBS	AMRESCO, USA	0694-500ML	0.03% Triton X-100
Blocking Buffer in TBS			1×Tris buffered saline

Alkaline phosphatase solution	Roche, Switzerland	11175041910	1.5 U/mL anti-digoxigenin alkaline phosphatase conjugated antibody
Alkaline phosphatase solution			Blocking Buffer in TBS
Alkaline phosphatase/ horse radish peroxidase solution	Roche, Switzerland	11175041910	1.5 U/mL anti-digoxigenin alkaline phosphatase conjugated antibody
Alkaline phosphatase/ horse radish peroxidase solution	TSA kit, Perkin Elmer, USA	NEL701A001KT	1% anti-biotin streptavidin horse radish peroxidase- conjugated antibody
Alkaline phosphatase/ horse radish peroxidase solution			Blocking Buffer in TBS
Hybridization Buffer	MPBIO, USA	FORMD002	50% Deionized Formamide
Hybridization Buffer			2×saline-sodium citrate
Hybridization Buffer	Sigma, USA	D8906-50G	10% dextran sulphate
Hybridization Buffer	invitrogen, USA	AM7119	20 µg/mL yeast t-RNA
Hybridization Buffer	Sigma, USA	D3159-10G	0.2 mg/mL herring sperm DNA
2-hydroxy-3-naphtic acid-2'-phenylamide phosphate/ 4-chloro-2-methylbenzenediazonium hemi-zinc chloride salt substrate	Roche, Switzerland	11758888001	1% 2-hydroxy-3-naphtic acid-2'-phenylamide phosphate (10 mg/mL)
2-hydroxy-3-naphtic acid-2'-phenylamide phosphate/ 4-chloro-2-methylbenzenediazonium hemi-zinc chloride salt substrate	Roche, Switzerland	11758888001	1% 4-chloro-2-methylbenzenediazonium hemi-zinc chloride salt (25 mg/mL)
2-hydroxy-3-naphtic acid-2'-phenylamide phosphate/ 4-chloro-2-methylbenzenediazonium hemi-zinc chloride salt substrate			Detection Buffer
Tyramide signal amplification substrate	TSA kit, Perkin Elmer, USA	NEL701A001KT	2% fluorescein-tyramides
Tyramide signal amplification substrate	TSA kit, Perkin Elmer, USA	NEL701A001KT	Amplification Diluent
Name	Company	Catalog Number	Comments
Instrument			
Freezing microtome	Leica, Nussloch, Germany	Jung CM300 cryostat	
Spectrophotometer	Thermo SCIENTIFIC, USA	NANODROP 2000	
Optical microscope	Olympus, Tokyo, Japan	Olympus IX71microscope	
Confocal microscope	Olympus, Tokyo, Japan	Olympus BX45 confocal microscope	