

Isolation and Transcriptome Analysis of Plant Cell Types

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Materials

Name	Company	Catalog Number	Comments
0.22 µm strainer	Sorfa	622110	
Agar	Yeasen	70101ES76	
Agilent fragment analyzer	Aglient	Aglient 5200	
Agilent high-sensitivity DNA kit	Aglient	DNF-474-0500	
Ampure XP beads	BECKMAN	A63881	
Betaine	yuanye	S18046-100g	
Bleach	Mr Muscle	FnBn83BK	20% (v/v) bleach
BSA	sigma	9048-46-8	
CaCl ₂	yuanye	S24109-500g	
Cellulase R10	Yakult (Japan)	9012-54-8	
Cellulase RS	Yakult (Japan)	9012-54-8	
Centrifuge tube (1.5 mL)	Eppendorf	30121589	
DNase, RNase, DNA and RNA Away Surface Decontaminants	Beyotime	R0127	
dNTPs (10 mM)	NEB	N0447S	
DTT (0.1 M)	invitrogen	18090050	
Ethanol	Sinopharm Chemical Reagent Co., Ltd	100092680	
FACS	BD FACS Melody	BD-65745	
FACS	Sony	SH800S	
Filter tip (1000 µL)	Thermo Scientific	TF112-1000-Q	
Filter tip (200 µL)	Thermo Scientific	TF140-200-Q	
Filter tip (10 µL)	Thermo Scientific	TF104-10-Q	
Filter tip (100 µL)	Thermo Scientific	TF113-100-Q	
Fluorescent microscope	Nikon	Eclipse Ni-E	
Four-Dimensional Rotating Mixer	Kylin -Bell	BE-1100	
Hemicellulase	sigma	9025-56-3	
IS PCR primer			5'-AAGCAGTGGTATCAACGCAGAG T-3'
KAPA HiFi HotStart ReadyMix(2X)	Roche	7958935001	

KCl	Sinopharm Chemical Reagent Co., Ltd	7447-40-7	
Macerozyme R10	Yakult (Japan)	9032-75-1	
Magnetic separation stand	invitrogen	12321D	
Mannitol	aladdin	69-65-8	
MES	aladdin	145224948	
MgCl ₂	yuanye	R21455-500ml	
Microcentrifuges	Eppendorf	Centrifuge 5425	
Micro-mini-centrifuge	Titan	Timi-10k	
MS	Phytotech	M519	
Nextera XT DNA Library Preparation Kit	illumina	FC-131-1024	
oligo-dT30VN primer			5'-AAGCAGTGGTATCAACGCAGAG TACTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTVN-3'
PCR instrument	Thermal cycler	A24811	
Pectolyase	Yakult (Japan)	9033-35-6	
Plant marker lines	Nottingham Arabidopsis Stock Centre (NASC)		
Qubit 1x dsDNA HS Assay Kit	invitrogen	Q33231	
Qubit 2.0 fluorometer	invitrogen	Q32866	
RNase inhibitor	Thermo Scientific	EO0382	
RNase-free water	invitrogen	10977023	
Solution A			400 mM mannitol, 0.05 % BSA , 20 mM MES (pH5.7), 10 mM CaCl ₂ , 20 mM KCl
Solution B			1 % (w/v)cellulase R10, 1 % (w/v) cellulase RS, 1 % (w/v)hemicellulase, 0.5 % (w/v)pectolyase and 1 % (w/v) Macerozyme R10 in a fresh aliquot of solution A
Sterile pestle	BIOTREAT	453463	
Strainer (40 µm)	Sorfa	251100	
SuperScript IV reverse transcriptase (200 U/µL)	invitrogen	18090050	
SuperScript IV buffer (5x)	invitrogen	18090050	
Test tube (5 mL)	BD Falcon	352052	
Thin-walled PCR tubes with caps (0.5 mL)	AXYGEN	PCR-05-C	
Triton X-100	Sangon Biotech	A600198-0500	
TSO primer			5'-AAGCAGTGGTATCAACGCAGAG TACATrGrG+G-3'
Vortex	Titan	VM-T2	