

Materials List for:

Peptide-derived Method to Transport Genes and Proteins Across Cellular and Organellar Barriers in Plants

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URL: <https://www.jove.com/video/54972>

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Materials

Name	Company	Catalog Number	Comments
(KH) ₉ -BP100 peptide	Custom-synthesized by RIKEN Brain Science Institute	N/A	Sequence: KHKHKHKHKHKHKHKH-KHKKLFKKILKYL
(BP100) ₂ -K ₈ peptide	Custom-synthesized by RIKEN Brain Science Institute	N/A	Sequence: KKLFFKILKYLKLFKIL-KYLKKKKKKK
BP100 peptide	Custom-synthesized by RIKEN Brain Science Institute	N/A	Sequence: KKLFFKILKYL
Cytox-(KH) ₉ peptide	Custom-synthesized by RIKEN Brain Science Institute	N/A	Sequence: MLSLRQSIRFFKHKHKH-KHKHKHKHKHKH
P35S-GFP(S65T)-TNOS and P35S-RLuc-TNOS	N/A	N/A	Encodes green fluorescent protein and Renilla luciferase genes, respectively, under the control of CaMV 35S constitutive promoter (Ref: Lakshmanan <i>et al.</i> Biomacromolecules 2013, 14, 10)
pDONR-cox2:gfp and pDONR-cox2:rluc	N/A	N/A	Encodes green fluorescent protein and Renilla luciferase genes, respectively, under the control of cox2 mitochondrial-specific promoter (Ref: Chuah <i>et al.</i> Sci Rep 2015, 5, 7751)
dsDNA (PCR-amplified from pBI221-P35S-RLuc-TNOS)	N/A	N/A	Encodes green fluorescent protein and Renilla luciferase genes, respectively, under the control of CaMV 35S constitutive promoter (Ref: Lakshmanan <i>et al.</i> Plant Biotechnol 2015, 32, 39)
GFP5 siRNA	N/A	N/A	For RNA interference-mediated silencing of green fluorescent protein (Ref: Numata <i>et al.</i> Plant Biotechnol J 2014, 12, 1027)
CHS siRNA	N/A	N/A	For RNA interference-mediated silencing of chalcone synthase (Ref: Numata <i>et al.</i> Plant Biotechnol J 2014, 12, 1027)
1 ml and 10 ml Plastic Syringes	TERUMO Corporation	SS-01T, SS-10ESZ	
1.5 ml Microcentrifuge Tube	AS ONE Corporation	151212	
96-Well Flat-Bottom Plate	Asahi Glass Co., Ltd.	3860-096	
Adhesive Tape	Sekisui Chemical Co., Ltd.	No. 835	
Alcohol Dehydrogenase	Sigma-Aldrich Co., LLC.	A-7011	
Atomic Force Microscope	Seiko Instruments Inc.	SPI3800, SPA 300HV	

Atomic Force Microscope	Hitachi High-Tech Science Corporation	AFM5300E	
BCA Protein Assay Kit	Thermo Fisher Scientific Inc.	23227	
Cantilever	Hitachi High-Tech Science Corporation	K-A102001593	
Confocal Laser Scanning Microscope	Carl Zeiss	LSM700	
Cork Borer	Sigma-Aldrich Co., LLC.	Z165220	For excision of leaves into 1-cm diameter disks
Coverslip	Matsunami Glass Ind., Ltd.	C02261	
Cuvette	Sarstedt	759116	
Folded Capillary Cell	Malvern Instruments, Ltd.	DTS1070	
Forceps	Shimizu Akira Inc.	Stainless pincet 150	
Homogenization Pestle	Ieda Trading Corp.	9993	
Mica	Nisshin EM Co., Ltd.	LC23Z	
Microcentrifuge	Beckman Coulter	BKA46472	
Microplate Reader	Molecular Devices Corporation	Spectra MAX M3	
Microscope Slide	Matsunami Glass Ind., Ltd.	S011120	
Pipette	Eppendorf Research® plus	3120000909	
Pipette Tips	AS ONE Corporation	2-5138-01, 2-5138-02, 2-5138-03	
Plastic Petri Dish	AS ONE Corporation	1-7484-01	
Renilla Luciferase Assay Kit	Promega corporation	E2810	
Rhodamine B Isothiocyanate	Sigma-Aldrich Co., LLC.	283924	
RNase-Free Water	Qiagen	129112	
Sodium Carbonate	Wako Pure Chemical Industries, Ltd.	199-01585	
Surgical Blade and Handle	FEATHER Safety Razor Co., Ltd.	Stainless steel No. 14 (blade), No. 3L (handle)	
Syringe Tip Cap	Musashi Engineering Inc.	NC-3E	
Weighing Balance	Sartorius	CPA225D	
Zeta Potentiometer	Malvern Instruments, Ltd.	Zetasizer Nano-ZS	