

Materials List for:

Practical Use of RNA Interference: Oral Delivery of Double-stranded RNA in Liposome Carriers for Cockroaches

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Materials

Name	Company	Catalog Number	Comments
GenJe Plus DNA in vitro Transfection reagent	SignaGen	SL100499	for lipoplexes preparation
Blend Taq plus	TOYOBO	BTQ-201	for PCR
Fast SYBR Green Master Mix	ABI	4385612	for qPCR
FirstChoice RLM-RACE Kit	Invitrogen	AM1700	for 3' UTR identification
MEGAscript T7 Transcription Kit	Invitrogen	AMB13345	for dsRNA synthesis
TURBO DNase	Invitrogen	AM2239	remove DNA template from dsRNA
TRIzol	Invitrogen	15596018	for dsRNA or total RNA extraction
RQ1 RNase-Free Dnase	Promega	M6101	remove DNA template from total RNA
chloroform	Sigma-Aldrich	C2432	for dsRNA or total RNA extraction
2-Propanol	Sigma-Aldrich	I9516	for dsRNA or total RNA extraction
ethanol	Sigma-Aldrich	24102	for dsRNA or total RNA extraction
Diethyl pyrocarbonate, DEPC	Sigma-Aldrich	D5758	for RNase free water preparation
glucose solution	Sigma-Aldrich	G3285	for lipoplexes preparation
Sodium chloride, NaCl	Sigma-Aldrich	S7653	insect saline buffer formula
Potassium chloride, KCl	Sigma-Aldrich	P9333	insect saline buffer formula
Calcium chloride, CaCl ₂	Sigma-Aldrich	C1016	insect saline buffer formula
Magnesium chloride hexahydrate, MgCl ₂ ·6H ₂ O	Sigma-Aldrich	M2670	insect saline buffer formula
EGTA	Sigma-Aldrich	E3889	enzyme inhibitor
dissecting scissor	F.S.T.		cockroach dissection
fine tweezers	F.S.T.		cockroach dissection
flexible tweezer	F.S.T.		cockroach holding
pipetman	RAININ	P10	sample preparation
microcentrifuge tube	Axygen	MCT175C, PCR02C	sample preparation
pipette tip	Axygen		sample preparation
vortexer	Digisystem	vm1000	sample preparation
Minispin centrifuge	The Gruffin Group	GMC 206	for liquid spin down
Centrifuge	ALC	PK121R	sample preparation
pH meter	JENCO	6071	for pH adjust
micro-volume spectrophotometer	Quawell	Q3000	nucleic acid quantitative

PCR Thermal cycler	ABI	2720	for template PCR or dsRNA synthesis incubation
quantitative real-time PCR	ABI	StepOne plus	gene expression quantitative
Centrifugal Vacuum Concentrators	eppendorf	5301	for dsRNA or total RNA extraction
Multipette	eppendorf	xstream	for real-time PCR sample loading
Agarose I	amresco	0710	for nucleic acid electrophoresis
tub gene specifc forward preimer	tri-l biotech		GGG ACA AGC CGG AGT GCA GA
tub gene specifc reverse preimer	tri-l biotech		TCC TGC TCC TGT CTC GCT GA
dsTub template forward primer	tri-l biotech		TAA TAC GAC TCA CTA TAG GGA CAA GCC GGA GTG CAG
dsTub template reverse primer	tri-l biotech		TAA TAC GAC TCA CTA TAG GGT CCT GCT CCT GTC TCG CTG
dsEGFP template forward preimer	tri-l biotech		TAA TAC GAC TCA CTA TAG GGT ATG GTG AGC AAG GGC GAG GAG
dsEGFP template reverse preimer	tri-l biotech		TAA TAC GAC TCA CTA TAG GGT GGC GGA TCT TGA AGT TCA CC
tub qPCR forward primer	tri-l biotech		GGA CCG CAT CAG GAA ACT GGC
tub qPCR reverse preimer	tri-l biotech		CCA CAG ACA GCC TCT CCA TGA GC
ef1 qPCR forward primer	tri-l biotech		CGC TTG AGG AAA TCA AGA AGG A
ef1 qPCRreverse preimer	tri-l biotech		CCT GCA GAG GAA GAC GAA G