

Materials List for:

# Therapeutic Gene Delivery and Transfection in Human Pancreatic Cancer Cells using Epidermal Growth Factor Receptor-targeted Gelatin Nanoparticles

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URL: <https://www.jove.com/video/3612>

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## Materials

Name	Company	Catalog Number	Comments
Type B gelatin, Bloom 225	Sigma-Aldrich	G9391	
2-iminothiolane hydrochloride	Sigma-Aldrich	I6256	
pEGFP-N1 plasmid	Elim Biopharm	N/A	
pORF-hp53 E. coli	Invitrogen	porf-hp53	
Glyoxal solution (40wt. % in H <sub>2</sub> O)	Sigma-Aldrich	128465	
Glycine	Sigma-Aldrich	410225-250G	
QIA filter Plasmid Mega kit	Qiagen	12281	
Beckman LE 80K Ultracentrifuge	Beckman Coulter Inc.	N/A	
FreeZone 6 Liter Console Freeze Dry Systems	Labconco Corp.	7753020	
mPEG-SCM, MW 2,000 Da	Laysan Bio Inc.	mPEG-SCM-2K-1g	
MAL-PEG-SCM, MW 2,000 Da	Jenkem Technology	A5001-1	
Zetasizer Nano	Malvern Instruments	Zetasizer Nano ZS	
Hitachi 4800 field emission scanning electron microscope	Hitachi	S-4800 UHR FE-SEM	
Quant-iT PicoGreen dsDNA Reagent and Kits	Invitrogen	P7589	
Lipofectin Transfection Reagent	Invitrogen	18292011	
DMEM	Mediatech, Inc.	10 013 CM	
RPMI	Mediatech, Inc.	50 020 PB	
Pierce BCA Protein Assay Kit	Thermo Fisher Scientific, Inc.	23225	
iBlot Dry Blotting System	Invitrogen	IB1001	
XCellSureLock Mini-Cell and XCell II Blot Module Kit CE Mark	Invitrogen	EI0002	
Pierce ECL Western Blotting Substrate	Thermo Fisher Scientific, Inc.	32109	
Kodak Digital X-ray Specimen (DXS) System	Kodak	N/A	
CellTiter 96 AQueous One Solution Cell Proliferation Assay (MTS)	Promega Corp.	G3580	
BioTek SynergyHT plate reader	BioTek	N/A	
Nanodrop 2000	Thermo Fisher Scientific, Inc.	N/A	
One-step RT-PCR kit	Qiagen	210212	
Chromatin Condensation/ Membrane Permeability/Dead Cell Apoptosis Kit	Invitrogen	V23201	

Apo-ONE Homogeneous Caspase-3/7 Assay kit	Promega Corp.	G7790	
Hybaid PCR Sprint Thermal Cycler	Thermo Fisher Scientific, Inc.	N/A	
EGF Receptor Antibody	Cell Signaling Technology	2232	
$\beta$ -Actin Antibody	Cell Signaling Technology	4967	
Anti-rabbit IgG, HRP-linked Antibody	Cell Signaling Technology	7074	
Mouse Monoclonal GFP Antibody	Novus Biologicals	NB600-597	
Goat Polyclonal GFP antibody (Alkaline Phosphatase)	Novus Biologicals	NB600-1502	
Phosphatase Substrate Kit	Thermo Fisher Scientific, Inc.	37620	