

Materials List for:

# A High-Throughput Luciferase Assay to Evaluate Proteolysis of the Single-Turnover Protease PCSK9

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## Materials

Name	Company	Catalog Number	Comments
PCR Tubes	USA Scientific	1402-2900	For PCR
Q5 Hot Start	New England Biolabs	M0493L	High-fidelity DNA Polymerase
Deoxynucleotide Solution Mix	New England Biolabs	N0447L	dNTPs (for PCR)
pPCSK9-NLucProteaseAssay-WT	Authors	n/a	Available from authors
pPCSK9-NLucProteaseAssay-S386A	Authors	n/a	Available from authors
Agarose LE	Gold Biotechnology	A-201-100	For DNA gels
E-Gel Imager System with Blue Light Base	ThermoFisher Scientific	4466612	For imaging DNA gels
SYBR Safe DNA Gel Stain	ThermoFisher Scientific	S33102	For DNA gels
Tris Base	ThermoFisher Scientific	BP152-1	For DNA gel running buffer
Glacial acetic acid	ThermoFisher Scientific	A38-500	For DNA gel running buffer
Ethylenediaminetetraacetic acid solution	Millipore Sigma	3690	EDTA, for DNA gel running buffer
1 kb DNA ladder	Gold Biotechnology	D010	DNA ladder
DpnI	New England Biolabs	R0176S	Restriction enzyme
LB Agar plates with 100 µg/mL carbenicillin	Teknova	L1010	LB-Carb plates
One Shot Mach1 T Phage-Resistant Chemically Competent <i>E. coli</i>	ThermoFisher Scientific	C862003	Chemically competent cells
LB Broth, Miller	ThermoFisher Scientific	BP1426-2	LB
Carbenicillin	Gold Biotechnology	C-103-5	Selective antibiotic
E.Z.N.A. Plasmid Mini Kit I	Omega BioTek	D6942-02	DNA Purification Miniprep kit
NanoDrop 2000 Spectrophotometer	ThermoFisher Scientific	ND-2000C	Spectrophotometer
293T Cells	American Tissue Culture Collection (ATCC)	CRL-3216	HEK 293T cells
DMEM, high glucose, pyruvate	ThermoFisher Scientific	11995065	DMEM, mammalian cell media
Fetal Bovine Sera	Axenia Biologix	F001	FBS
Trypsin-EDTA (0.05%), phenol red	ThermoFisher Scientific	25300062	Trypsin, for cell dissociation
Phosphate buffered saline (PBS)	ThermoFisher Scientific	10010023	PBS
Countess automated cell counter	ThermoFisher Scientific	C10227	Automated cell counting
Countess cell counting chamber slides	ThermoFisher Scientific	C10228	Slides for cell counting
CELLSTAR Tissue Culture Plates, White, White-Bottom, with Lid	Grenier Bio-One	655083	White, white-bottom 96 well plate

TempPlate non-skirted 96-well PCR plate, natural	USA Scientific	1402-9596	96 well plate for master plasmid plate
Nunc 2.0mL DeepWell Plates	ThermoFisher Scientific	278743	96 well deep well plate
Lipofectamine 3000	ThermoFisher Scientific	L3000008	Lipid transfection reagent, Lf3K
P3000 Reagent	ThermoFisher Scientific	L3000008	DNA pre-complexation reagent, provided with Lf3K
OptiMEM I Reduced Serum Medium	ThermoFisher Scientific	31985062	Reduced serum medium for transfection
(+)-Sodium L-ascorbate	Millipore Sigma	A4034	Sodium ascorbate
Sodium chloride	Millipore Sigma	S9888	NaCl
Albumin, Bovine Serum, Fraction V, Low Heavy Metals	Millipore Sigma	12659	BSA
Methanol (HPLC)	ThermoFisher Scientific	A4524	MeOH
Hydrochloric acid	VWR	JT9535-2	Concentrated HCl
Coelenterazine	Gold Biotechnology	CZ2.5	Luciferase substrate
Syringe Filter, Sterile	ThermoFisher Scientific	09-720-3	Sterile filter, PVDF, 0.22 µm pore
Pipet-Lite Multi Pipette L12-200XLS+	Rainin	17013810	Multichannel pipette
Pipet-Lite Multi Pipette L12-20XLS+	Rainin	17013808	Multichannel pipette
Pipet-Lite Multi Pipette L12-10XLS+	Rainin	17013807	Multichannel pipette
Reagent reservoir	Corning	4870	Trough for reagents
Centrifuge tubes, 15 mL	ThermoFisher Scientific	05-539-12	15 mL tubes
Centrifuge tubes, 50 mL	Corning	430829	50 mL tubes
Spark Microplate Reader	Tecan	N/a	Plate Reader
Excel	Microsoft	2016 for Mac	Spreadsheet software
Prism	GraphPad Software	v7	Scientific data analysis software