

Materials List for:

Analysis of Group IV Viral SSHPS Using In Vitro and In Silico Methods

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Materials

Name	Company	Catalog Number	Comments
250 mL Erlenmeyer Flask	VWR	89000-362	
2-mercaptoethanol	Acros Organics (Fisher)	125472500	Danger: Acutely Toxic. Open bottle in hood to avoid inhaling the fumes.
4L Pyrex wide-mouth graduated Erlenmeyer flask with screw-cap	Millipore Sigma	CLS49954L-1EA	
AKTA Prime Plus	GE Healthcare	17-0729-01	
AKTA XK 16/20 Column	GE Healthcare	28988937	
Amicon Ultra-0.5 Centrifugal Filter Unit	Millipore Sigma	UFC501096	
Amicon Ultra-15 Centrifugal Filter Unit	Millipore Sigma	UFC901096	
Amicon Ultra-4 Centrifugal Filter Unit	Millipore Sigma	UFC801024	
Ampicillin	Sigma	A0166	Danger: Allergic reactions (skin or breathing).
Chelating Sepharose Fast Flow	GE Healthcare	17-0575-02	Once the resin is equilibrated with 0.2 M Nickel Sulfate it is referred to as a Nickel Column in the text. Column will have a green color after washing with water. The column will have a blue color after equilibrating with buffer.
Chloramphenicol	RPI	C61000	Danger: May cause cancer.
Corning 50 mL centrifuge tubes	Corning	430828	Suggestion: Polypropylene tubes are less likely to crack during sonication than Polyethylene tubes
Corning 96 Well Half-Area Microplate, Non-Binding Surface	Corning	3993	
Dialysis Tubing Clips	Fisher Scientific	PI68011	
Disposable PD-10 Desalting Column	GE Healthcare	17-0851-01	
DNase	Sigma	DN25-1G	
DTT (DL-Dithiothreitol)	RPI	D11000-50.0	Warning: Acute Oral Toxicity; skin and eye irritation
EDTA	Fisher Scientific	S311-500	
Fisherbrand Petri Dishes with Clear Lid	Fisher Scientific	FB0875712	
Glycerol	Acros Organics (Fisher)	15892-0010	
HEPES	Millipore Sigma	H4034-1KG	
Imidazole	Acros Organics	301870010	Danger: Toxic, Irritant

IPTG (Isopropyl β -D-thiogalactopyranoside)	Calbiochem (Millipore Sigma)	420291	Do not breathe dust. Avoid contact with eyes and skin.
Laemml Sample Buffer	BIO-RAD	1610737	
Luria Bertani Agar	Fluka (Millipore Sigma)	L3027-1KG	Suggestion: Autoclave with magnetic stirrer in the liquid, and stir while cooling. Wait to add antibiotic until you can hold your hands on the bottle without pain for 30 seconds.
Luria Bertani Media	Fisher Bioreagents	BP1426-2	
Lysozyme	Sigma	L4919-5g	
Mini-PROTEAN Tetra Vertical Electrophoresis CellGel Box	BIO-RAD		
Nalgene Oak Ridge High-Speed PPCO Centrifuge Tubes	Nalgene (Thermo Scientific)	3119-0050	
Nanodrop	Thermo Fisher		
New Brunswick Innova 42R Shaker Incubator	Eppendorf	M1335	
Nickel Sulfate Hexahydrate (Crystalline/Certified ACS), Fisher Chemical	Fisher Scientific	N73-500	Danger: Harmful if swallowed or inhaled, skin and eye irritation
One Shot BL21(DE3) Chemically Competent <i>E. coli</i>	Invitrogen (Thermo Fisher)	C600003	May be harmful if inhaled or swallowed. May cause skin and eye irritation with susceptible people.
One Shot BL21(DE3) pLysS Chemically Competent <i>E. coli</i>	Invitrogen (Thermo Fisher)	C606003	May be harmful if inhaled or swallowed. May cause skin and eye irritation with susceptible people.
pet15b plasmid DNA	Novagen (Millipore Sigma)	69661	GenScript Inc. was used for commercial DNA synthesis. The pet15b plasmid was used for the CFP/YFP substrates.
pet32b	Novagen (Millipore Sigma)	69016-3	The pet32b plasmid was used for the cysteine protease construct.
Pierce Protease Inhibitor Mini Tablets, EDTA-free	Thermo Fisher	A32955	Warning: Skin corrosion/irritation; eye damage
Plate Reader	Molecular Devices	Model M5	
Precision Plus Protein All Blue Prestained Protein Standard	BIO-RAD	161-0373	
Protein Extraction Reagent	Novagen (Millipore Sigma)	70584-4	BugBuster or Bper (Catalog # 78248, ThermoFisher)
Q-Sepharose Fast Flow	G.E. Healthcare	17-0510-01	Anion exchange resin
RunBlue (12%) 17-well PAGE gels	Expedeon	BCG01227	Any 12% pre-cast polyacrylamide gel can be used
RunBlue 20x SDS Running Buffer	Expedeon	NXB50500	Dilute 50 mL with 950 mL deionized water to obtain 1x
RunBlue Instant Blue Gel Stain	Expedeon	ISB1L	Do not dilute, use as directed
Sodium Chloride	Fisher Chemical	S271-10	
Sonifier Cell Disrupter 450 Sonicator	Branson Ultrasonics (VWR)	Model No. 101-063-346R	Sonicator was used on level 5
Spectra/Por 6-8 kD MWCO	Spectrum Labs	132645T	Dialysis Tubing
SP-Sepharose Fast Flow	G.E. Healthcare	17-0729-01	Cation exchange resin
Thrombin from bovine plasma	Sigma	T6634-500UN	
Tris Base	Fisher Scientific	BP152-500	Caution: Eye/Skin Irritant