

Materials List for

Quantifying *Yersinia pseudotuberculosis* Type III Secretion System Activity Following Iron Starvation and Anaerobic Growth

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jove.com/video/66642

Materials

Name	Company	Catalog Number	Comments
10 mL Luer-Lok Tip syringe	BD	301029	
10x SDS Running Buffer	Home made		0.25 M Tris base, 1.92 M Glycine, 1% SDS in 1 L volume
12.5% SDS-Page Gel	Home made		
15 mL culture tubes	Falcon	352059	For initial overnight
15 mL Falcon tubes	Falcom	352196	For supernatant collection
250 mL culture flask	Belco	251000250	
500 mL Filter System	Corning	431097	
6 N Hydrochloric acid solution	Fisher Scientific	7732185	
Acetone	Fisher Chemical	A949-4	4 L
Bio Rad ChemiDoc MP Imaging System	Bio Rad	Model Number: Universal Hood III	
Borosilicate glass culture tubes	Fisherbrand	14-961-34	For anaerobic culturing
Chelex 100 Resin	Bio Rad	142-1253	
Chelex M9 +0.9% Glucose media	Home made		6 g/L Na ₂ HPO ₄ , 3 g/L KH ₂ PO ₄ , 0.5 g/L NaCl, 1 g/L NH ₄ Cl, 1% casamino acids, 0.9% dextrose , 0.0005% thiamine, 5 g/L Chelex 100 Resin. Stir media for 18 h at room temp, filter using 500 mL Corning filtration unit, then add MgSO ₄ for 1 mM MgSO ₄ final solution
Final Sample Buffer (FSB)	Home made		0.1 M Tris-HCl, 4% SDS, 20% glycerol, 0.2% of Bromophenol Blue
FSB:DTT solution	Home made		FSB+0.2M DTT
Image Lab Software	Bio Rad	https://www.bio-rad.com/en-us/product/image-lab-software?ID=KRE6P5E8Z	Software
Isotemp Heat Block	Fisher Scientific	88860021	

LB Agar Plates	Home made		10 g Tryptone, 5 g Yeast extract, 10 g NaCl, 15 g Agar in 1 L total volume. Autoclaved
M9+0.2% Glucose Media	Home made		6 g/L Na ₂ HPO ₄ , 3 g/L KH ₂ PO ₄ , 0.5 g/L NaCl, 1 g/L NH ₄ Cl, 1 mM MgSO ₄ , 1 mg/L FeSO ₄ 7H ₂ O, 1% casamino acids, 0.2% dextrose , 0.0005% thiamine
Millex-GP PES 0.22um filter attachment for syringe	Millipore	SLGPR33RS	For FeSO ₄ 7H ₂ O filtration
Millex-GV PVDF 0.22um filter attachment for syringe	Millipore	SLGVR33RS	For supernatant filtration
Precision Plus Protein Unstained Standard	Bio Rad	1610363	
SDS-PAGE Gel Apparatus	Bio Rad	Model Number: Mini PROTEAN Tetra Cell	
SilverXpress Silver Staining Kit	Invitrogen	LC6100	
The BellyDancer Shaker	IBI Scientific	BDRAA1155	
Trichloroacetic acid solution 6.1N	Sigma Aldrich	T0699	
Vinyl Anaerobic Chamber	Coy Lab Products		https://coylab.com/products/anaerobic-chambers/vinyl-anaerobic-chambers/#details
qPCR Primer sequences			
yfeA forward - CAC AGT CAG CAG ACC TTA TCT T			
yfeA reverse - GGC AGA CGG GAC ATC TTT AAT A			
bfd forward - ccagcatcagccccatacag			
bfd reverse - tggctgtcggatgcactc			
yopE forward - CCATAAACCGGTGGTGAC			
yopE reverse - CTTGGCATTGAGTGACTG			