

Materials List for

Enrichment of Native and Recombinant Extracellular Vesicles of Mycobacteria

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Materials

Name	Company	Catalog Number	Comments
A2 type Biosafety Cabinet	Thermo Fisher Scientific, USA		1300 series
Bench top Centrifuge	Eppendorf, USA		5810 R
BstB1, HindIII, HpaI	NEB, USA		NEB
Cell densitometer	GE Healthcare, USA		Ultraspec 10
Citric Acid	Sigma-Aldrich, Merck, USA		Sigma Aldrich
Dibasic Potassium Phosphate	Sigma-Aldrich, Merck, USA		Sigma Aldrich
Double Distilled Water	Merck, USA		~18.2 MW/cm @ 25 °C
Electroporation cuvettes	Bio-Rad, USA		2 mm
Electroporator	Bio-Rad, USA		Electroporator
EsxA-specific Ab	Abcam, UK		Rabbit polyclonal
Ferric Ammonium Citrate	Sigma-Aldrich, Merck, USA		Sigma Aldrich
Floor model centrifuge	Thermo Fisher Scientific, USA		Sorvall RC6 plus
Glassware	Borosil, INDIA		1 L Erlenmeyer flasks
Glycerol	Sigma-Aldrich, Merck, USA		Sigma Aldrich
HEPES and Sodium Chloride	Sigma-Aldrich, Merck, USA		Sigma Aldrich
Incubator shakers	Thermo Fisher Scientific, USA		MaxQ 6000 & 8000
L-Asparagine	Sigma-Aldrich, Merck, USA		Sigma Aldrich
Luria Bertani Broth and Agar, Miller	Hi Media, INDIA		Hi Media
Magnesium Sulfate Heptahydrate	Sigma-Aldrich, Merck, USA		Sigma Aldrich
Magnetic stirrer	Tarsons, INDIA		Tarsons
mCherry-specific Ab	Abcam, UK		Rabbit monoclonal
Microwave	LG, INDIA		MC3286BLT
Middlebrook 7H9 Broth	BD, USA		Difco Middlebrook 7H9 Broth
Middlebrook ADC enrichment	BD, USA		BBL Middlebrook ADC enrichment
Nanodrop	Thermo Fisher Scientific, USA		Spectronic 200 UV-Vis
NEB5a	NEB, USA		a derivative of DH5a
Optiprep (Iodixanol)	Merck, USA		Available as 60% stock solution (in water)
PCR purification kit	Hi Media, INDIA		Hi Media
pH Meter	Mettler Toledo, USA		Mettler Toledo
Plasmid DNA mini kit	Hi Media, INDIA		Hi Media
Plate incubator	Thermo Fisher Scientific, USA		New Series

Plasmid pMV261	Addgene, USA * *The plasmid is no more available in this plasmid bank		Shuttle vector
Proof-reading DNA Polymerase	Thermo Fisher Scientific, USA		Phusion DNA Plus Polymerase
Q5 Proof-reading DNA Polymerase	NEB, USA		NEB
Refrigerated circulating water bath	Thermo Fisher Scientific, USA		R20
Middlebrock 7H11 Agar base	BD, USA		BBL Seven H11 Agar base
SOC broth	Hi Media, INDIA		Hi Media
Sodium Hydroxide	Sigma-Aldrich, Merck, USA		Sigma Aldrich
T4 DNA Ligase	NEB, USA		NEB
Tween-80	Sigma-Aldrich, Merck, USA		Sigma Aldrich
Ultracentrifuge	Beckman Coulter, USA		Optima L100K
Ultracentrifuge tubes - 14 mL	Beckman Coulter, USA		Polyallomer type – ultra clear type in SW40Ti rotor
Ultracentrifuge tubes - 38 mL	Beckman Coulter, USA		Polypropylene type– cloudy type for SW28 rotor
Ultrasonics cleaning waterbath sonicator	Thermo Fisher Scientific, USA		Sonicator - bench top model
0.22 µm Disposable filters	Thermo Fisher Scientific, USA		Nunc-Nalgene
30-kDa Centricon concentrators	Merck, USA		Amicon Ultra centrifugal filters - Millipore
3X FLAG antibody	Sigma-Aldrich, Merck, USA		Sigma Aldrich
400 mL Centrifuge bottles	Thermo Fisher Scientific, USA		Nunc-Nalgene
50 mL Centrifuge tubes	Corning, USA		Sterile, pre-packed
Bacteria			
Strain			
<i>Escherichia coli</i>	NEB, USA		NEB 5-alpha (a derivative of DH5α).
Msm expressing cfp29::mCherry	This study		MC2 155
Msm expressing cfp29::esxA	This study		MC2 155
Msm expressing cfp29::esxA::3X FLAG	This study		MC2 155
<i>Mycobacterium smegmatis</i> (Msm)	Prof. Sarah M. Fortune, Harvard Univ, USA		MC ² 155