

Materials List for:

Vector Competence Analyses on *Aedes aegypti* Mosquitoes using Zika Virus

Sasha R. Azar^{1,2}, Scott C. Weaver^{1,3,4}

¹Institute for Human Infections and Immunity, University of Texas Medical Branch

²Department of Pathology, University of Texas Medical Branch

³Department of Microbiology and Immunology, University of Texas Medical Branch

⁴World Reference Center for Emerging Viruses and Arboviruses, University of Texas Medical Branch

Correspondence to: Sasha R. Azar at srazar@utmb.edu

URL: <https://www.jove.com/video/61112>

DOI: [doi:10.3791/61112](https://doi.org/10.3791/61112)

Materials

Name	Company	Catalog Number	Comments
3mL Standard Reservoir	R37P30	Hemotek Ltd	Insectary Equipment
7/32" Stainless Steel 440 Grade C Balls	4RJH9	Grainger	Grinding Media
Acetone, Histological Grade, Fisher Chemicals, Poly Bottle, 4L, 4/Case	A16-P4	FisherScientific	Fixative
Adenosine 5'-triphosphate disodium salt hydrate, microbial, BioReagent, suitable for cell culture	A6419-1G	MilliporeSigma	Reagent
Anti-Flavivirus Group Antigen Antibody, clone D1-4G2-4-15	MAB10216	MilliporeSigma	Primary Antibody for focus forming assay
Anti-Mouse IgG (H+L) Antibody, Human Serum Adsorbed and Peroxidase-Labeled, 1.0mL/Bottle	5450-0011	KPL/Seracare	Secondary Antibody for focus forming assay
Bleach	NC0427256	FisherScientific	Decontamination
Corning, Cell Culture Treated Flasks, 150cm ² , Vented Cap, Case of 50	10-126-34	FisherScientific	Cell culture consumable
Costar Cell Culture Plates, 24-well, 5/bag, 100/case, Corning	07-200-740	FisherScientific	Cell culture consumable
Costar Cell Culture Plates, 96-well, 5/bag, 100/case, Corning	07-200-91	FisherScientific	Cell culture consumable
Crystal Violet	C0775-100G	MilliporeSigma	Stain
Eppendorf Snap Cap Microcentrifuge Safe-Lock 2mL Tubes, 500/Case	05-402-7	FisherScientific	Plastic consumable
Falcon 15mL Conical Centrifuge Tubes	14-959-70C	FisherScientific	Plastic consumable
Falcon 50mL Conical Centrifuge Tubes	14-959-49A	FisherScientific	Plastic consumable
Falcon Disposable Polystyrene Serological 10mL Pipets, 200/Case	13-675-20	FisherScientific	Plastic consumable
Falcon Disposable Polystyrene Serological 1mL Pipets, 1000/Case	13-675-15B	FisherScientific	Plastic consumable
Falcon Disposable Polystyrene Serological 25mL Pipets, 200/Case	13-675-30	FisherScientific	Plastic consumable
Falcon Disposable Polystyrene Serological 5mL Pipets, 200/Case	13-675-22	FisherScientific	Plastic consumable
Falcon Standard Tissue Culture Dishes	08-772B	FisherScientific	Plastic consumable

Fetal Bovine Serum-Premium, 500mL	S11150	Atlanta Biologicals	Cell culture reagent
Fisherbrand Economy Plain Glass Microscope Slides	12-550-A3	FisherScientific	Immobilization of Mosquitos
FU1 Feeder	FU1-0	Hemotek Ltd	Insectary Equipment; feeding units
Gibco DPBS with Calcium and Magnesium, 10 x 500mL Bottles	140-040-182	FisherScientific	Cell culture reagent
Gibco Fungizone, Amphotericin B, 250µg/mL, 50mL/Bottle	15-290-026	Fisher Scientific	Cell culture reagent
Gibco Penicillin-Streptomycin (10,000 U/mL), 100mL/Bottle, 20 Bottles/Case	15-140-163	FisherScientific	Cell culture reagent
Gibco, Trypsin-EDTA (.25%), Phenol red, 20 x 100mL Bottles	25-200-114	FisherScientific	Cell culture reagent
Gibcom DMEM, High Glucose, 10 x 500mL Bottles	11-965-118	FisherScientific	Cell culture reagent
Human Blood, Unspecified Gender, Na-Citrate, 1 Unit	7203706	Lampire	Bloodmeal preparation
InsectaVac Aspirator	2809B	Bioquip	Insectary Equipment
Methanol, Certified ACS, Fisher Chemicals, Amber Glass Bottle, 4L, 4/Case	A412-4	FisherScientific	Fixative
Methyl cellulose, viscosity: 3,500-5,600 cP, 2 % in water(20 °C), 250g/Bottle	M0512-250G	MilliporeSigma	Cell culture reagent
Micro-chem Plus Disinfectant Detergent	C849T34	Thomas Scientific	Decontamination; working dilution of dual quaternary ammonium
Mineral Oil, BioReagent, for molecular biology	M5904-5X5ML	MilliporeSigma	Immobilization of Mosquitos
O-rings	OR37-25	Hemotek Ltd	Insectary Equipment
Plastic Plugs	PP5-250	Hemotek Ltd	Insectary Equipment
PS6 Power Unit (110-120V)	PS6120	Hemotek Ltd	Insectary Equipment; power source
Rubis Forceps, Offset blades, superfine points	4525	Bioquip	Insectary Equipment
Sarstedt Inc, 2mL Screw Cap Microtube, Conical Bottom, O-ring Cap, Sterile, 1000/Case	50-809-242	FisherScientific	Plastic consumable
Sucrose, BioUltra, for molecular biology	84097-250G	MilliporeSigma	Reagent
ThermoScientific, ART Barrier Low Retention 1000µL Pipette Tips, 100 tips/Rack, 8 Racks/Pack, 4 Packs/Case	21-402-487	FisherScientific	Plastic consumable
ThermoScientific, ART Barrier Low Retention 200µL Pipette Tips, 96 tips/Rack, 10 Racks/Pack, 5 Packs/Case	21-402-486	FisherScientific	Plastic consumable
ThermoScientific, ART Barrier Low Retention 20µL Pipette Tips, 96 tips/Rack, 10 Racks/Pack, 5 Packs/Case	21-402-484	FisherScientific	Plastic consumable
ThermoScientific, ART Barrier Low Retention, Extended Reach 10µL Pipette Tips, 96 tips/Rack, 10 Racks/Pack, 5 Packs/Case	21-402-482	FisherScientific	Plastic consumable
TissueLyser II	85300	QIAGEN	Homogenization

TrueBlue Peroxidase Substrate Kit, 200mL	5510-0030	Seracare	Developing solution for focus forming assay
Vero	CCL-81	American Type Culture Collection	Mammalian cell line to amplify virus and conduct infectious assay
Vero C1008 [Vero 76, clone E6, Vero E6]	CRL-1586	American Type Culture Collection	Mammalian cell line to amplify virus and conduct infectious assay