



Ordering Guide

Overview

This ordering guide lists all the **supplies, reagents and equipment** you will need to implement the Phage Discovery component of the course (see below).

- To facilitate planning and ordering of the supplies necessary, and where appropriate, the *estimated* quantities for each item is included, either as per student or per class.
- Items listed as optional are not critical for implementing the course, though many would significantly simplify preparation for and implementation of the course.
- If you are considering substituting items listed in the list, check with the SEA Team for suitability of the substitutes. Some substitutes have been found to negatively impact experiments as described in SEA-PHAGES protocols.

Vendors

We have provided vendor information and catalog numbers for the supplies listed in this document. Note, however, that supplies can be purchased from any vendor of your choice, and that you should take advantage of better pricing on individual items when it is available.

- **Fisher Scientific**

HHMI has negotiated special pricing for supplies that are available from Fisher Scientific. These prices are listed in the “Fisher Scientific Quote” document available at seaphages.org. If you intend to take advantage of these pre-negotiated prices, please use the quote provided at the top of the document. *If the quote # provided does not work, or if your local Fisher representative is unable to apply the negotiated-prices, please contact the Thermo Fisher VAS Team to inform that you are part of the Science Education Alliance program with HHMI and would like to utilize an HHMI quote. Failing that, please contact us info@seaphages.org for assistance.*

Thermo Fisher VAS TEAM

Phone: 866-884-2019 | E-mail: cs.vastatlanta@thermofisher.com

Hours of operation: 7a.m. - 9p.m. eastern

- **New England Biolabs**

If you intend to purchase any reagents from New England Biolabs, remember to ask your local rep if there is an education discount available.

- **Ted Pella**

Electron Microscopy supplies can be purchased from this vendor.

Supplies for in-class Use

Items	# per student	# per classroom	vendor	catalog #
Consumables				
Microcentrifuge tubes (Eppendorf)	100		Fisher	05-402-27
Conical tubes (15mL)	10		Fisher	05 538 59A
Conical tubes (50mL)	10		Fisher	05 526B
Micropipet tips, box (p1000)		optional	Fisher	see quote
Micropipet tips, box (p20-200)	3		Fisher	02-717-351
Micropipet tips, box (p10)	1		Fisher	see quote
Serological pipette (5mL or 10 mL)	50		Fisher	13 678 11D
Syringe (5mL)	10		ColePalmer	07944-02
Syringe filter (0.22um)	10		Fisher	09 927 43A
Sterile wooden sticks or loop		optional	Fisher	23 400 112
Tube top filtration system	5		Fisher	976134
Glassware				
Baffled flask (250mL), glass or PETG	2		Fisher	10 041 5B
Media bottle (100mL)		optional	Fisher	06 414 1A
Erlenmeyer flask		optional	Fisher	10 041 5D
Culture tube	40		Fisher	14 961 27
Culture tube caps	40		Fisher	14 957 92
Molecular Biology Supplies				
1kb ladder 50ng/uL, aliquot (100uL)		2	New England Biolabs	N3012S
DNase 1		1	Fisher	ICN10057520
RNase A		1	Fisher	BP25391
BamHI + buffer		2	New England Biolabs	R0136S
Clal + buffer		2	New England Biolabs	R0197S
EcoRI + buffer		2	New England Biolabs	R0101S
HaeIII + buffer		2	New England Biolabs	R0108S
HindIII + buffer		2	New England Biolabs	R0104S
Sall + buffer		2	New England Biolabs	R0138S
Wizard DNA Clean-up System		1	Fisher	PR A7280
EM Supplies				
200-400 mesh carbon-formvar coated copper grids	1		Ted Pella	01813
Uranyl Acetate 2%, aliquot (100uL)		1	Fisher	NC1031425
EM reverse forceps		2	Ted Pella	5377-NM
Pelco tabs	1		Ted Pella	16084-1
Whatman #3 filter paper wedges	2		Fisher	09 924 120
Parafilm (5x5cm)		2	Fisher	13 374 10
Grid storage box		1	Ted Pella	161-96
Small bench equipment				
Rack (13mm)	1		Fisher	14 809 60
Rack (30mm)	1		Fisher	14 809 36
Rack (microcentrifuge tube)	1		Fisher	05 541 25
Butane Can / Mobile Bunsen burner (if needed)	0.5		Fisher	S41872
Butane Can Replacements (if needed)	1		Fisher	S41873
Striker	0.5		Fisher	12 007
Vortexer		optional	Fisher	see Fisher Site
Microcentrifuge	0.25		Fisher	05 400 007
Micropipettor (p20)	1		Fisher	FBE00020

Micropipettor (p200)	1		Fisher	FBE00200
Micropipettor (p1000)		optional	Fisher	see quote
Pipette-aid	1		Fisher	13 683C
Specialty and large equipment				
Balance		1		01 912 407
High speed centrifuge		optional		75 060 817
Shaking incubator		1		14 285 732
Heating block		2		88 860 021
Water bath		2		07 202 155
Reach in incubator		1		13 998 035
Imaging system		1		UVP97019801
Spectrophotometer/Nanodrop		1		14 385 491
Gel Rig and Power Supply		1		FB300Q
Gel casting tray/comb (27 lanes)		2		OWA6
4deg C refrigerator		access required		20LREETSA
-20deg C freezer		access required		05LFEETSA
-80deg C freezer		access required		956PM
Electron microscope		access required		
Archiving Supplies				
Barcoded tubes (provided by HHMI)	1			
DMSO (200uL)		1	Fisher	BP231 100
Additional Supplies				
Labeling pen	1			
Laboratory Notebook	1			
Ruler	0.5			
Timer	0.5			
Computer/laptop		access required		
Latex or vinyl gloves, (S,M,L,XL)		1 each	Fisher	19 005 427
Sealable plastic bag	4			
Microwave		optional		

Reagents / Equipment for Prep

Items	# per student	# per classroom	vendor	catalog #
Chemicals/Media/Reagents				
DNase 1		1	Fisher	see quote
RNase A		1	Fisher	see quote
EDTA, disodium salt		optional	Fisher	BP120 500
Isopropanol		1L	Fisher	A451 1
Ethanol		1L	Fisher	BP2818500
Agarose		25g	Fisher	BMA50001
Albumin		100g	Fisher	50 332 737
Dextrose, anhydrous		500g	Fisher	D16 500
Glycerol		500mL	Fisher	AAA16205AP
Tween 80		500mL	Fisher	BP338 500
10X TAE/TBE		1L	Fisher	BMA50844
Tris Base		1kg	Fisher	AC167620010
Calcium chloride		1kg	Fisher	C77 500
Magnesium chloride		500g	Fisher	BP214 500
Carbenicillin		10g	Fisher	ICN10018301
Cycloheximide		1g	Fisher	BP1302 10

Ethidium bromide		1	Fisher	BP1302 10
Agar, bacteriological		250g	Fisher	BP1423 500
Luria base, Miller		500g	Fisher	12795027
7H9 broth base		500g	Fisher	DF0713 17 9
CiDecon (disinfectant)		3L	Fisher	04 355 64
Handsoap		1L	Fisher	435516
Concentrated loading dye		1	Fisher	BP645 5
Glassware/Consumables for Prep				
Baffled flasks, 1L		2	Fisher	10 041 5D
Baffled flasks, 250mL, glass or PETG		4	Fisher	10 530
Filtration units, 0.5-1L		optional	Fisher	09 761 34
Petri dishes, case of 500		2	Fisher	FB0875712
Media bottles, 100mL		optional	Fisher	06 414 1A
Media bottles, 250mL		optional	Fisher	06 414 1B
Media bottles, 500mL		optional	Fisher	06 414 1C
Media bottles, 1L		optional	Fisher	06 414 1D
Beakers, 250mL		optional	Fisher	02 555 2
Beakers, 500mL		optional	Fisher	02 555 2
Beakers, 2L		optional	Fisher	02 555 2
Stir bars		optional	Fisher	14 513 61
Equipment for Prep				
Autoclave		access required		
Analytical balance		access required		
Stir plates		access required		
Thermometers		optional		