



Ebola virus sequencing kit-list

Nanopore | amplicon | native barcoding

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Overview: The following protocol is adapted from the methods of Quick et al. (2017) *Nature Protocols* **12**: 1261–1276 doi:10.1038/nprot.2017.066 [↗](#) and covers primers, amplicon preparation and clean-up, then uses a single-tube protocol to barcode and adaptor ligate the library, before running minION.

This document is part of the Ebola virus Nanopore sequencing protocol package:

<http://artic.network/ebov/> [↗](#)

Related documents:

Ebola primer scheme:

<https://github.com/artic-network/primer-schemes/tree/master/ZaireEbola/V2> [↗](#)

Ebola virus Nanopore sequencing protocol:

<http://artic.network/ebov/ebov-seq-sop.html> [↗](#)

Ebola virus Nanopore sequencing kit-list:

<http://artic.network/ebov/ebov-seq-kit.html> [↗](#)



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Library Preparation and Sequencing Reagents:

Product	Supplier	Cat No.	Unit Cost	# Req	Cost	
Ebola Zaire V3 Primers	IDT		£450	1	£450	<input type="checkbox"/>
SuperScript IV Reverse Transcriptase	Thermo	18090050	£230	1	£230	<input type="checkbox"/>
dNTP mix (10 mM each)	Thermo	R0192	£82	1	£82	<input type="checkbox"/>
RNase OUT	Thermo	10777019	£163	1	£163	<input type="checkbox"/>
Q5® Hot Start HF Polymerase (2xMM)	NEB	M0494L	£623	1	£623	<input type="checkbox"/>
NEBNext® Ultrall™ End-prep	NEB	E7546L	£729	1	£729	<input type="checkbox"/>
NEBNext® Ultrall™ Ligation Module	NEB	E7595L	£1,204	1	£1,204	<input type="checkbox"/>
NEBNext® Quick Ligation Module	NEB	E6056S	£317	1	£317	<input type="checkbox"/>
Aline PCRCLEAN DX 50ml	Aline	AL-AC1003-50	£325	1	£325	<input type="checkbox"/>
Ligation Sequencing Kit 1D	Nanopore	SQK-LSK109	£470	1	£470	<input type="checkbox"/>
Native Barcoding Expansion Kit 1-12	Nanopore	EXP-NBD104	£235	1	£235	<input type="checkbox"/>
Native Barcoding Expansion Kit 13-24	Nanopore	EXP-NBD114	£235	1	£235	<input type="checkbox"/>
Flow Cell Priming Kit	Nanopore	EXP-FLP002	£30	2	£60	<input type="checkbox"/>
Flow Cell Wash Kit	Nanopore	EXP-WSH003	£90	2	£180	<input type="checkbox"/>
R9.4.1 flow cells	Nanopore		£700	2	£1,400	<input type="checkbox"/>
QuantiFluor ONE dsDNA System	Promega	E4870	£187	1	£187	<input type="checkbox"/>
TOTAL COST					£6,890	

Equipment and Containment

Product	Supplier	Cat No.	Unit Cost	# Req	Cost	
1000µL pipettes	Gilson	10387322	£210	2	£420	<input type="checkbox"/>
100µL pipettes	Gilson	10442412	£210	2	£420	<input type="checkbox"/>
10µL pipettes	Gilson	10236072	£210	2	£420	<input type="checkbox"/>
2µL pipettes	Gilson	10082012	£210	2	£420	<input type="checkbox"/>
Sprout Microfuge (12V)	PhillipHarris	B8R04574	£170	2	£340	<input type="checkbox"/>
PV-1 Mini Vortex	FisherSci	PV-1	£150	2	£300	<input type="checkbox"/>
Portable Heat Block	Mobitec	Pad3-H-CB	£310	1	£310	<input type="checkbox"/>
DynaMag-2 magnetic rack	Thermo	12321D	£540	1	£540	<input type="checkbox"/>
MiniPCR™ Mini16	Cambio	Mp-QP-1016-01	£675	2	£1,350	<input type="checkbox"/>
Quantus Fluorometer	Promega	E6150	£1,236	1	£1,236	<input type="checkbox"/>
PCR Workstation	StarLabs	E2396-9693	£20	3	£60	<input type="checkbox"/>
Collapsible Tube racks (large x5)	FisherSci	11710634	£50	1	£50	<input type="checkbox"/>
Cold Racks (0.2-0.5mL)	Sigma	Z606634-1EA	£50	2	£100	<input type="checkbox"/>
Lab Mats	StarLab	E3860-0061	£25	2	£50	<input type="checkbox"/>
USB Lights	Amazon	Jebsen-T05	£20	2	£40	<input type="checkbox"/>
Portable UV Lamps	Amazon	B078LSR3MG	£20	2	£40	<input type="checkbox"/>
Portable glove box	Amazon	B01B1MGRR0	£70	2	£40	<input type="checkbox"/>
TOTAL COST					£6,136	

Consumables and Disposables

Product (Number)	Supplier	Cat No.	Unit Cost	# Req	Cost	
Stacked 1000µL Filter Tips (500)	FisherSci	11977724	£70	2	£140	<input type="checkbox"/>
Stacked 100µL Filter Tips (1000)	FisherSci	11947724	£60	1	£60	<input type="checkbox"/>
Stacked 10µL Filter Tips (1000)	FisherSci	11907724	£60	1	£60	<input type="checkbox"/>
1.5mL Eppendorf Tubes (500)	StarLab	I1415-2500	£20	2	£40	<input type="checkbox"/>
8-strip PCR tubes with Individual Caps, 0.2 ml (1000)	StarLab	I1402-2900	£115	1	£115	<input type="checkbox"/>
0.5 ml thin-walled tubes (1000)	Axygen	PCR-05-C	£40	1	£40	<input type="checkbox"/>
MyGo PCR Tubes (500)	IT-IS	SKU7688	£85	1	£85	<input type="checkbox"/>
BioBin® Disposal Bins (100)	FisherSci	10394373	£121	1	£121	<input type="checkbox"/>
Gloves (S/M/L, 100)	StarLab	SG-P-X	£5	2	£10	<input type="checkbox"/>
Paper Towels	Generic			4	N/A	<input type="checkbox"/>
Decon Wipes (240)	MediPal	PMC6038	£6	2	£12	<input type="checkbox"/>

Product (Number)	Supplier	Cat No.	Unit Cost	# Req	Cost	
Back-tie Lab Gowns (45G)	VWR	113-8316	£56	10	£56	<input type="checkbox"/>
RNAse Away (250mL)	Thermo	10328011	£60	2	£120	<input type="checkbox"/>
DNA Away (250mL)	Thermo	7010PK	£20	2	£40	<input type="checkbox"/>
TOTAL COST					£887	

Cold Chain, Power and Storage

Product (Number)	Supplier	Cat No.	Unit Cost	# Req	Cost	
Flat dehydrated cold sheets (ThermaFreeze)	Amazon	B003ET2G74	£15	10	£150	<input type="checkbox"/>
Thermos Radiance Cooler Bag	Amazon	B00BHW5B4U	£10	4	£40	<input type="checkbox"/>
Portable Fridge Bag	Amazon	B008N5UU3G	£70	1	£70	<input type="checkbox"/>
Credo Cube Series 20M 4L	Pelican	Contact Supp.			N/A	<input type="checkbox"/>
PowerAdd Pilot Pro2 85Wh LiION 9-20V	Amazon	B013HXKZYW	£80	2	£160	<input type="checkbox"/>
Solar Charger, 85Wh, LiION 5-20V	Amazon	B00AE9FBCO	£85	2	£170	<input type="checkbox"/>
Goal Zero Yeti 150 Portable Power Station	GoalZero	SKU22004	£200	1	£200	<input type="checkbox"/>
Goal Zero Nomad 28 Plus Solar Panel	Goal Zero	SKU11805	£250	1	£250	<input type="checkbox"/>
Surge Protector Extension (4-plug)	Belkin	B0002AG0F2	£6	3	£18	<input type="checkbox"/>
SKROSS Universal Mini Travel Adaptor	Amazon	B00OHSWG6C	£10	2	£20	<input type="checkbox"/>
Peli Air 1615 Waterproof Equipment Case	RS Comp.	121-8893	£550	1	£550	<input type="checkbox"/>
Eagle Creek Cargo Hauler, 120L	Amazon	B01HIGO3OC	£150	1	£150	<input type="checkbox"/>
BESTEK 200W Power Inverter DC 12V	Amazon	B01N2P9V64	£30	1	£30	<input type="checkbox"/>
Samsung Portable SSD T5 1TB	Amazon	B074M774TW	£320	2	£640	<input type="checkbox"/>
Seagate® 5TB External HD	Amazon	B01M058Q39	£119	2	£238	<input type="checkbox"/>
TOTAL COST					£2,686	