

Ebola virus sequencing kit-list

Nanopore | amplicon | native barcoding

Document: ARTIC-EBOV-seqKit-v1.0.0

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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 2

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 2



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Library Preparation and Sequencing Reagents:

| Product | Supplier | Cat No. | Unit Cost | # Req | Cost | |
|------------------------------------|-----------|------------|-----------|-------|---------|--|
| Vilo SSIV RT | Thermo | 11756050 | £793 | 1 | £793 | |
| Q5® Hot Start HF Polymerase (2xMM) | NEB | M0494L | £611 | 1 | £611 | |
| NEBNext® Ultrall™ End-prep | NEB | E7456L | £722 | 1 | £722 | |
| Ebola Zaire V2 Primers* | Thermo | | £240 | 1 | £220 | |
| NEBNext® Ultrall™ Ligation Module | NEB | E7595L | £1,204 | 1 | £1,204 | |
| NEBNext® FFPE Repair Module | NEB | M6630L | £539 | 1 | £539 | |
| Agencourt® AmpureXP™ Beads (60mL) | FisherSci | 10453438 | £620 | 1 | £620 | |
| Ligation Sequencing Kit 1D | Nanopore | SQK-LSK108 | £450 | 4 | £1,800 | |
| Low Input by PCR Barcoding Kit | Nanopore | SQK-LWB001 | £500 | 2 | £1,000 | |
| Native Barcoding Expansion Kit | Nanopore | EXP-NBD103 | £250 | 4 | £1,000 | |
| R9.4.1 flow cells | Nanopore | | £375 | 12 | £4,500 | |
| Qubit® dsDNA HS Assay Kit | Thermo | Q32851 | £185 | 2 | £370 | |
| TOTAL COST | | | | | £13,379 | |

Equipment and Containment

| Product | Supplier | Cat No. | Unit Cost | # Req | Cost | |
|-----------------------------------|--------------|-------------|-----------|-------|---------|--|
| 1000μL pipettes | Gilson | 10387322 | £210 | 2 | £420 | |
| 100µL pipettes | Gilson | 10442412 | £210 | 2 | £420 | |
| 10µL pipettes | Gilson | 10236072 | £210 | 2 | £420 | |
| Sprout Microfuge (12V) | PhilipHarris | B8R04574 | £170 | 2 | £340 | |
| PV-1 Mini Vortex | WolfLabs | PV-1 | £150 | 2 | £300 | |
| Portable Heat Block | Mobitec | Pad3-H-CB | £310 | 1 | £310 | |
| DynaMag-2 magnetic rack | Thermo | 12321D | £540 | 1 | £540 | |
| MiniPCR™ Mini8 | Cambio | MPQP100001 | £535 | 4 | £2,140 | |
| MyGo® Mini qPCR | IT-IS | SKU7642 | £6,500 | 1 | £6,500 | |
| Qubit4® spectrophotometer | Thermo | Q33228 | £2,578 | 1 | £2,578 | |
| Collapsible Tube racks (small x5) | FisherSci | 11770045 | £50 | 1 | £50 | |
| Collapsible Tube racks (large x5) | FisherSci | 11710634 | £50 | 1 | £50 | |
| Cold Racks (0.2-0.5mL) | Sigma | Z606634-1EA | £50 | 2 | £100 | |
| Lab Mats | StarLab | E3860-0061 | £25 | 2 | £50 | |
| USB Lights | Amazon | Jebsen-T05 | £20 | 2 | £40 | |
| Portable UV Lamps | Amazon | B078LSR3MG | £20 | 2 | £40 | |
| Portable glove box | Amazon | B01B1MGRR0 | £70 | 2 | £40 | |
| TOTAL COST | | | | | £14,438 | |

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Consumables and Disposables

| Product (Number) | Supplier | Cat No. | Unit Cost | # Req | Cost | |
|----------------------------------|-----------|------------|-----------|-------|------|--|
| Stacked 1000µL Filter Tips (500) | FisherSci | 11977724 | £70 | 2 | £140 | |
| Stacked 100µL Filter Tips (1000) | FisherSci | 11947724 | £60 | 1 | £60 | |
| Stacked 10µL Filter Tips (1000) | FisherSci | 11907724 | £60 | 1 | £60 | |
| 1.5mL Eppendorf Tubes (500) | StarLab | I1415-5500 | £20 | 2 | £40 | |
| 0.6mL Eppendorf Tubes (500) | StarLab | I1405-1500 | £20 | 1 | £20 | |
| 0.2mL 8-strip tubes (1000) | StarLab | I1402-3600 | £60 | 1 | £60 | |
| Qubit Reaction Tubes (500) | Thermo | Q32856 | £50 | 1 | £50 | |
| MyGo PCR Tubes (500) | IT-IS | SKU7688 | £85 | 1 | £85 | |
| BioBln® Disposal Bins (100) | FisherSci | 10394373 | £121 | 1 | £121 | |
| Gloves (Large, 100) | StarLab | SG-P-L | £5 | 2 | £10 | |
| Gloves (Small, 100) | StarLab | SG-P-S | £5 | 2 | £10 | |

| Product (Number) | Supplier | Cat No. | Unit Cost | # Req | Cost | |
|--------------------------|----------|----------|-----------|-------|------|--|
| Paper Towels | Generic | | | 4 | N/A | |
| Decon Wipes (240) | MediPal | PMC6038 | £6 | 2 | £12 | |
| Back-tie Lab Gowns (45G) | WWR | 113-8316 | £56 | 10 | £56 | |
| RNAse Away (250mL) | Thermo | 10328011 | £60 | 2 | £120 | |
| DNA Away (250mL) | Thermo | 7010PK | £20 | 2 | £40 | |
| TOTAL COST | | | | | £884 | |

Cold Chain, Power and Storage

| Product (Number) | Supplier | Cat No. | Unit Cost | # Req | Cost | |
|--|-----------|---------------|-----------|-------|------|--|
| Flat dehydrated cold sheets (ThermaFreeze) | Amazon | B003ET2G74 | £15 | 10 | £150 | |
| Thermos Radiance Cooler Bag | Amazon | B00BHW5B4U | £10 | 4 | £40 | |
| Portable Fridge Bag | Amazon | B008N5UU3G | £70 | 1 | £70 | |
| Credo Cube Series 20M 4L | Pelican | Contact Supp. | | | N/A | |
| PowerAdd Pilot Pro2 85Wh LiION 9-20V | Amazon | B013HXKZYW | £80 | 2 | £160 | |
| Solar Charger, 85Wh, LiION 5-20V | Amazon | B00AE9FBCO | £85 | 2 | £170 | |
| Goal Zero Yeti 150 Portable Power Station | GoalZero | SKU22004 | £200 | 1 | £200 | |
| Goal Zero Nomad 28 Plus Solar Panel | Goal Zero | SKU11805 | £250 | 1 | £250 | |
| Surge Protector Extension (4-plug) | Belkin | B0002AG0F2 | £6 | 3 | £18 | |
| SKROSS Universal Mini Travel Adaptor | Amazon | B000HSWG6C | £10 | 2 | £20 | |
| Peli Air 1615 Waterproof Equipment Case | R&S Comp. | 121-8893 | £550 | 1 | £550 | |
| Eagle Creek Cargo Hauler, 120L | Amazon | B01HIGO3OC | £150 | 1 | £150 | |
| BESTEK 200W Power Inverter DC 12V | Amazon | B01N2P9V64 | £30 | 1 | £30 | |
| Samsung Portable SSD T5 1TB | Amazon | B074M774TW | £320 | 2 | £640 | |
| Seagate® 5TB External HD | Amazon | B01M058Q39 | £119 | 2 | £238 | |
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TOTAL COST £2,686