

Table S1. Summary of all four extraction methods.

| Extraction | KingFisher Flex System | IndiMag 48 system | TripleE easy-lab | TripleE point-of-care |
|---------------------------|---------------------------------------|--|--|--|
| Extraction kit | NucleoMag VET kit (Macherey-Nagel) | IndiMag Pathogen Kit w/o plastic (Indical Bioscience) | IndiMag Pathogen Kit w/o plastic (Indical Bioscience) | IndiMag Pathogen Kit w/o plastic (Indical Bioscience) |
| Maximal throughput | 96 | 48 | 8 | 8 |
| Sample load | | 100 µl | | |
| Proteinase K | | 20 µl | | |
| Magnetic beads | 20 µl NucleoMag B-Beads | 25 µl MagAttract Suspension G | 25 µl MagAttract Suspension G | 25 µl MagAttract Suspension G |
| Lysis buffer | 100 µl VL1 | 100 µl VXL | 100 µl VXL | 100 µl VXL |
| Binding buffer | 350 µl VEB | 400 µl ACB | 400 µl ACB | 400 µl ACB |
| Wash 1 | 600 µl VEW 1 | 700 µl AW1 | 500 µl AW1 | 500 µl AW1 |
| Wash 2 | 600 µl VEW 2 | 700 µl AW2 | 500 µl AW1 | 500 µl AW1 |
| Wash 3 | 600 µl EOTH 80 % | - | 500 µl AW2 | 500 µl AW2 |
| Wash 4 | - | - | 500 µl EOTH 80 % | 500 µl EOTH 80 % |
| Elution | 100 µl VEL | 100 µl AVE | 100 µl AVE | 100 µl AVE |
| Extraction time | | | | |
| Incubation | 5 min | 1 min | 3 min | 1 min |
| Run | 20 min | 31 min | 7 min | 5 min |
| Total | 25 min | 32 min | 10 min | 6 min |