**Table A**: List of references, molecular methods, primers and probes, and thermal profiles used to detect each pathogen included in the research project:

|  |  |  |  |
| --- | --- | --- | --- |
| **Pathogens with target gene and references** | **Molecular method used** | **Sequences and identification of primers and probes**  | **Thermal Profile / Positivity cut-off for Real time PCR** |
| COWPOX VIRUSORF D11L (128bp)Modified by Gavrilova et al., 2010DOI: [10.1016/j.jcv.2010.06.003](https://doi.org/10.1016/j.jcv.2010.06.003) | Real time PCR with TaqMan probe | CPX FOR 5’-AAAACTCTCCACTTTCCATCTTCT-3’ | Activation at 95° C for 5’Denaturation at 95° C for 15’’Annealing at 65° C for 30’’Repeat for 40 cycles  |
| CPX REV 5’-GCATTCAGATACGGATACTGATTC-3’ | Cut-offCt. ≤ 35 |
| CPX PROBE 5’- FAM-CCACAATCAGGATCTGTAAAGCGAGC-3’-BHQ1 |
| INFLUENZA VIRUS type AGene M (99bp)Hoffmann et al., 2010DOI: [10.2376/0005-9366-123-286](https://doi.org/10.2376/0005-9366-123-286) | Real time RT-PCR with TaqMan probe | IAV M1-F5’-AGATGAGTCTTCTAACCGAGGTCG-3’ | Reverse Transcription 45° C for 10’Activation/inactivation at 95° C for 10’Denaturation at 95° C for 15’’Annealing/ extension at 55° C for 20’’Repeat for 42 cycles |
| IAV-M1.1 R 5’-TGC AAA AAC ACT TTC AAG TYT CTG-3’ |
| IAV-M1.2-R5’- TGC AAA GAC ACT TTC CAG TCT CTG-3’ | Cut-offCt. ≤ 35 |
| Probe IAV – M1-FAM 5’- FAM -TCAGGCCCCCTCAAAGCCGA- 3’ BHQ1 |
| MAMMALIAN ORTHOREOVIRUS L1 gene (416bp)Modified Leary et al., 2002DOI: [10.1016/s0166-0934(02)00058-7](https://doi.org/10.1016/s0166-0934%2802%2900058-7) | End - point RT PCR | L1-rv5F 5’-GCATCCATTGTAAATGACGAGTCTG-3’ | Reverse transcription at 50°C for 30’Activation at 95° C for 15’Denaturation at 94° C for 30’’Annealing at 52° C for 30’’Extension at 72°C for 40’’Repeat for 44 cyclesFinal elongation at 72°C for 5’ |
| L1-rv6R 5’-CTTGAGATTAGCTCTAGCATCTTCTG-3’ |  |
| NOROVIRUS RdRP (300bp)Jiang et al.,1999DOI: [10.1016/s0166-0934(99)00114-7](https://doi.org/10.1016/s0166-0934%2899%2900114-7) | End - point RT PCR and Sanger Sequencing  | p2905’-GATTACTCCAAGTGGGACTCCAC-3’ | Reverse transcription at 55°C for 30 min Denaturation at 94°C for 2’Activation at 94°C for 30’’ Annealing at 48°C for 30’’ Extension at 68°C for 20’’ Final elongation at 68°C for 5’Repeat for 35 cycles |
| p1105’-ACDATYTCATCATCACCATA-3’ |  |
| ROTAVIRUS TIPO A Nsp3 (78bp)Pang et al., 2004DOI: 10.1002/jmv.20009 | Real time RT-PCR with TaqMan probe | RVA7-1F5’-RCATRACCCYCTATGAGCAC-3’ | Reverse Transcription 50° C for 20’Activation/inactivation at 95° C for 15’Denaturation at 94° C for 45’’Annealing/ extension at 60° C for 45’’Repeat for 45 cycles |
| Rota NVP3-R5’- GGTCACATAACGCCCC-3’ | Cut-offCt. ≤ 38  |
| Otto et al., 2015DOI: [10.1016/j.vetmic.2015.07.021](https://doi.org/10.1016/j.vetmic.2015.07.021) | RVA7 probe 5’- FAM -ATAGTTAAAAGCTAACACTGTCAAAAACCTAAA-3’BHQ1 |
| JHEV (Orthohepevirus A) ORF 3 (70bp)Jothikumar et al. 2006 https://doi.org/10.1016/j.jviromet.2005.07.004 | Real time RT-PCR with TaqMan probe | JHEV F 5'- GGT GGT TTC TGG GGT GAC -3' | Reverse Transcription 45° C for 10’Activation/inactivation at 95° C for 10’Denaturation at 95° C for 15’’Annealing at 56° C for 20’’Extension at 72° C for 30’’Repeat for 42 cycles |
| JHEV PROBE 5' -6FAM - TGA TTC TCA GCC CTT CGC 3' - BHQ1 | Cut-offCt. ≤ 38 |
| JHEVR 5'- AGG GGT TGG TTG GAT GAA -3' |
| RHEV (Orthohepevirus C) 73bpJohne et al. 2012https://doi.org/10.1016/j.meegid.2012.02.021 | Real time RT-PCR with TaqMan probe | rHEV-F 5' - TAC CCG ATG CCG GGC AGT - 3' | Reverse Transcription 45° C for 10’Activation/inactivation at 95° C for 10’Denaturation at 95° C for 15’’Annealing at 56° C for 20’’Extension at 72° C for 30’’Repeat for 42 cycles |
| rHEV-R25' - ATC YAC ATC WGG GAC AGG - 3' | Cut-offCt. ≤ 38 |
| rHEV-P25' 6FAM - AAT GAC AGC ACA GGC ACC GGC GCC 3' - BHQ1 |
| LEPTOSPIRA Spp.rrs 16S gene (87bp)Smythe et al. 2002https://doi.org/10.1186/1471-2334-2-13 | Real time PCR with TaqMan probe | LEPTO F 5’ CCC GCG TCC GAT TAG 3’ | Activation at 95° C for 10’Denaturation at 95° C for 15’’Annealing/ extension at 60° C for 60’’Repeat for 40 cycles |
| LEPTO R 5' TCC ATT GTG GCC GRA CAC 3’ | Cut-offCt. ≤ 38 |
| LEPTO PROBE 5’FAM- CTC ACC AAG GCG ACG ATC GGT AGC -TMR 3’ |
| SARS-COV-2V.M. Corman, et al. Euro Surveill. 2020 Jan;25(3):2000045https://doi.org/10.2807/1560-7917.es.2020.25.3.2000045 | Real time RT-PCR with TaqMan probe | E\_Sarbeco\_F 5’-ACAGGTACGTTAATAGTTAATAGCGT- 3’ | Reverse Transcription 50° C for 30’Activation/inactivation at 95° C for 10’Denaturation at 95° C for 15’’Annealing at 60° C for 60’’Repeat for 45 cycles |
| E\_Sarbeco\_R 5’-ATATTGCAGCAGTACGCACACA- 3’ |
| E\_Sarbeco\_P15’-6FAM-ACACTAGCCATCCTTACTGCGCTTCG-BHQ1- 3’ |
| N\_Sarbeco\_F 5’-CACATTGGCACCCGCAATC-3’ |
| N\_Sarbeco\_R 5’-GAGGAACGAGAAGAGGCTTG-3’ |
| N\_Sarbeco\_P1FAM-5’-ACTTCCTCAAGGAACAACATTGCCA-BBQ-3’ | Cut-offCt. ≤ 40 |
| RdRP\_SARSr-F 5’-GTGARATGGTCATGTGTGGCGG-3’ |
| RdRP\_SARSr-R 5’-CARATGTTAAASACACTATTAGCATA-3’ |
| RdRP\_SARSr-P1FAM-5’CCAGGTGGWACRTCATCMGGTGATGC-BBQ-3’ |
| RdRP\_SARSr-P2FAM-5’-CCAGGTGGAACCTCATCAGGAGATGC-BBQ-3’ |
| Universal positive internal control EGFPHoffmann, B 2006https://doi.org/10.1016/j.jviromet.2006.05.020 | Real time RT PCR, TaqMan Probe  | EGFP 1-F 5 ’- GAC CAC TAC CAG CAG AAC AC - 3’ | Reverse Transcription 45° C for 10’Activation/inactivation at 95° C for 10’Denaturation at 95° C for 15’’Annealing/ extension at 55° C for 20’’Extension at 72°C for 30’’Repeat for 42 cycles |
| EGFP 2-R 5’- GAA CTC CAG CAG GAC CAT G - 3’ | Cut-offCt. ≤ 36 |
| EGFP-Probe HEX 5’- AGC ACC CAG TCC GCC CTG AGC A - BHQ1 3’ |
| *Capnocytophaga canimorsus* *rpoB* geneVan Dam et al. 2009DOI: [10.1128/JCM.01246-09](https://dx.doi.org/10.1128/JCM.01246-09) | Real time PCR TaqMan Probe | C. Cani FOR 5’-TTTCAGCTTCATTAATTCCTTTCC-3’ | Activation at 95° C for 5’Denaturation at 95° C for 15’’Annealing/ extension at 63° C for 30’’Repeat for 49 cycles |
| C. Cani REV 5’-GCCTGACGCATCATATTCG-3’ |
| C. Cani Probe 5’-FAM-CGATGATGCGAACCGTGCGTTGAC-TAM-3’ |
| *Capnocytophaga cynodegmi**rpoB* geneVan Dam et al. 2009DOI: [10.1128/JCM.01246-09](https://dx.doi.org/10.1128/JCM.01246-09) | Real time PCR TaqMan Probe | C. Cyno FOR 5’-GAATTTCGGCTTCATTGATTCC-3’ | Cut-offCt. ≤ 35 |
| C. Cyno REV 5’-CGCATCATATTTGACCCCATC-3’ |
| C. Cyno Probe 5’-FAM-CTTGGAACACGATGATGCGAACCG-TAM-3’ |