**Supplementary Table 2.** Oligonucleotide sequences and conditions used to amplify specific DNA of the tested pathogens.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species | Locus | Primer | | | Nested-PCR conditions | | | | | Reference |
|  | Identity | Sequence (5’ 🡪 3’) | Denaturation | Annealing | Extension | Cycles (no.) | Amplicon  size (bp) |
| *Enterocytozoon bieneusi* | Internal transcribed spacer region (*ITS*) of rRNAa | 1o | **EBITS3** | GGTCATAGGGATGAAGAG | 94oC/45s | 57oC/30s | 72oC/60s | 35 | 435 | (Buckholt *et al.*, 2002) |
| **EBITS4** | TTCGAGTTCTTTCGCGCTC |
| 2o | **EBITS1** | GCTCTGAATATCTATGGCT | 94oC/45s | 55oC/30s | 72oC/40s | 30 | 390 |
| **EBITS2.4** | ATCGCCGACGGATCCAAGTG |
| *Encephalitozoon* spp. | Internal transcribed spacer region  (*ITS*) of rRNAa | 1o | **INT580F** | TGCAGTTAAAATGTCCGTAGT | 94oC/45s | 55oC/30s | 72oC/60s | 35 | 1000 | (Didier *et al.*, 1995; Katzwinkel-Wladarsch *et al.*, 1996) |
| **INT580R** | TTTCACTCGCCGCTACTCAG |
| 2o | **MSP3** | GGAATTCACACCGCCCGTCvyTAT | 94oC/45s | 55oC/30s | 72oC/40s | 35 | 289-315b |
| **MSP4A** | CCAAGCTTATGCTTAAGTymAArGGGT |
| *Giardia intestinalis* | Triosephosphate isomerase (*TPI*)a | 1o | **AL3543** | AAATIATGCCTGCTGGTCG | 94oC/45s | 50oC/45s | 72oC/60s | 35 | 605 | (Sulaiman *et al.*, 2003) |
| **AL3546** | CAAACCTTITCCGCAAACC |
| 2o | **AL3544** | CCCTTCATCGGIGGTAACTT | 94oC/45s | 50oC/45s | 72oC/60s | 35 | 530 |
| **AL3545** | GTGGCCACCACICCCGTGCC |
| Glutamate dehydrogenase (*GDH*) | 1o | **GDH1**  **GDH2** | TTCCGTRTYCAGTACAACTC  ACCTCGTTCTGRGTGGCGCA | 94oC/45s | 55oC/30s | 72oC/60s | 35 | 754 | (Cacciò *et al.*, 2008) |
| 2o | **GDH3**  **GDH4** | ATGACYGAGCTYCAGAGGCACGT  GTGGCGCARGGCATGATGCA | 94oC/45s | 55oC/30s | 72oC/60s | 35 | 532 |
| β-giardin (*BG*) | 1o | **G7**  **G759** | AAGCCCGACGACCTCACCCGCAGTGC  GAGGCCGCCCTGGATCTTCGAGACGAC | 94oC/45s | 62oC/30s | 72oC/60s | 35 | 753 | (Cacciò *et al.*, 2002; Lalle *et al.*, 2005) |
| 2o | **β-GIAF**  **β-GIAR** | GAACGAGATCGAGGTCCG  CTCGACGAGCTTCGTGTT | 94oC/45s | 55oC/30s | 72oC/60s | 35 | 511 |
| *Cryptosporidium* spp. | Small ribosomal subunit (18S) rRNAa | 1o | **SSUF1** | TTCTAGAGCTAATACATGCG | 94oC/45s | 55oC/45s | 72oC/60s | 35 | 1325 | (Xiao *et al.*, 1999) |
| **SSUR1** | CCCATTTCCTTCGAAACAGGA |
| 2o | **SSUF2** | GGAAGGGTTGTATTTATTAGATAAAG | 94oC/45s | 55oC/45s | 72oC/60s | 35 | 826-864b |
| **SSUR2** | CTCATAAGGTGCTGAAGGAGTA |
| 60-kDa glycoprotein (*gp60*) | 1o | **GP60-Canis-F1**  **GP60-Canis-R1** | ATACTCTGGTCTCCCGTTT  GTACTCGGAAGCGGTGTA | 94oC/45s | 52oC/45s | 72oC/80s | 35 | 750 | (Jiang *et al.*, 2021) |
| 2o | **GP60-Canis-F2**  **GP60-Canis-R2** | AAGGCGCCTCACTCATT  TCAGTTAGATATCACCCATTAA | 94oC/45s | 52oC/45s | 72oC/80s | 35 | 700 |

a locus used for pathogen detection; b depending on isolate; 1o – conditions for primary step of nested-PCR; 2o – conditions for secondary step of nested-PCR.