**Supplementary Table S1.** Information of nested-PCR primers and reaction conditions

|  |  |  |  |
| --- | --- | --- | --- |
| Parasites | Primer sequence (5’-3’) | Primer name/amplicon length (bp) | References |
|  | PCR condition |  |  |
| *Blastocystis* sp. | SSU rRNA / 1,139  | Porpruk S et al., 2015a |
| 1st | F: GGAAGCTTATCTGGTTGATCCTGCCAGTA / R: GGGATCCTGATCCTTCCGCAGGTTCACCTAC |
|  | 94℃ for 5 min / 30 cycles (93℃ for 1 min, 65℃ for 1.5 min, 72℃ for 2 min) / 72℃ for 10 min |
| 2nd | F: GGAGGTAGTGACAATAAATC / R: ACTAGGAATTCCTCGTTCATG |
|  | 94℃ for 5 min / 30 cycles (94℃ for 1 min, 49℃ for 1 min, 72℃ for 1.5min) / 72℃ for 10 min |
| *Cryptosporidium felis* | 18S rRNA / 833  | Joute JR et al., 2016b |
| 1st | F: TTCTAGAGCTAATACATGCG / R: CATTTCCTTCGAAACAGGA |
|  | 94℃ for 5 min / 35 cycles (94℃ for 1 min, 56℃ for 1 min, 72℃ for 1 min) / 72℃ for 10 min |
| 2nd | F: GGAAGGGTTGTATTTATTAGATAAAG / R: AAGGAGTAAGGAACAACCTCCA |
|  | 94℃ for 5 min / 35 cycles (94℃ for 1 min, 56℃ for 1 min, 72℃ for 1 min) / 72℃ for 10 min |
| *Enterocytozoon bieneusi* | ITS / 389  | Khanduja S et al., 2017c |
| 1st | F: GATGGTCATAGGGATGAAGAGCTT / R: ACGGATCCAAGTGATCCTGTATT |
|  | 94℃ for 3 min / 35 cycles (94℃ for 45 s, 55℃ for 45 s, 72℃ for 60 s) / 72℃ for 10 min |
| 2nd | F: AGGGATGAAGAGCTTCGGCTCTG / R: AGTGATCCTGTATTAGGGATATT |
|  | 94℃ for 3 min / 35 cycles (94℃ for 45 s, 55℃ for 45 s, 72℃ for 60 s) / 72℃ for 10 min |
| *Giardia lamblia* | β-giardin / 510  | Lam HYP et al., 2021d |
| 1st | F: AAGCCCGACGACCTCACCCGCAGTGC / R: GAGGCCGCCCTGGATCTTCGAGACGAC |
|  | 94℃ for 5 min / 40 cycles (94℃ for 30 s, 65℃ for 30 s, 72℃ for 60 s) / 72℃ for 10 min |
| 2nd | F: GAACGAGATCGAGGTCCG / R: CTCGACGAGCTTCGTGTT |
|  | 94℃ for 5 min / 40 cycles (94℃ for 30 s, 56℃ for 30 s, 72℃ for 60 s) / 72℃ for 10 min |
| *Toxoplasma gondii* | B1 / 96  | Wang H et al., 2017e |
| 1st | F: GGAACTGCATCCGTTCATGAG / R: TCTTTAAAGCGTTCGTGGTC |
|  | 94℃ for 10 min / 35 cycles (93℃ for 10 s, 62.5℃ for 10 s, 72℃ for 15 s) / 72℃ for 10 min |
| 2nd | F: TGCATAGGTTGCAGTCACTG / R: GGCGACCAATCTGCGAATACACC |
|  | 94℃ for 10 min / 35 cycles (93℃ for 10 s, 57℃ for 10 s, 72℃ for 30 s) / 72℃ for 10 min |

1. Popruk S, Udonsom R, Koompapong K, Mahittikorn A, Kusolsuk T, et al. Subtype distribution of *Blastocystis* in Thai-Myanmar border, Thailand. *Korean J Parasitol* 2015;1(2):13-19. http://doi: 10.3347/kjp.2015.53.1.13
2. Joute JR, Gill JPS, Singh BB. Prevalence and molecular epidemiology of *Cryptosporidium parvum* in dairy calves in Punjab (India). *J Parasit Dis* 2016;40(3):745-749. http://doi: 10.1007/s12639-014-0571-y
3. Khanduja S, Ghoshal U, Agarwal V, Pant P, Ghoshal UC. Identification and genotyping of *Enterocytozoon bieneusi* among human immunodeficiency virus infected patients. *J Infect Public Health* 2017;10(1):31-40. http://doi: 10.1016/j.jiph.2016.01.005
4. Lam HYP, Chen TTW, Tseng YC, Chang KC, Yang TH, et al. Detection and genotyping of *Giardia duodenalis* from cattle and pigs in Hualien country, Eastern Taiwan. *J Microbiol Immunol Infect* 2021;54(4):718-727. http://doi: 10.1016/j.jmii.2020.05.009
5. Wang H, Zhang L, Ren Q, Yu F, Yang Y. Diagnosis of swine toxoplasmosis by PCR and genotyping of *Toxoplasma gondii* from pigs in Henan, central China. *BMC Vet Res* 2017 13(1):152. http://doi: 10.1186/s12917-017-1079-3