**Supplementary material**

Table S1. The animal species and numbers included in this study.

|  |  |  |
| --- | --- | --- |
| Animal species (No.) | Latin name | Positive cases /total no. |
| **NHPs (190)** | *Pantroglodytes*  | 8/21 |
|  | *Lemur catta*  | 14/34 |
|  | *Lemur variegatus* | 7/26 |
|  | *Rhinopithecus*  | 2/30 |
|  | *Saimiri sciureus*  | 2/44 |
|  | *Papio*  | 0/35 |
| **Carnivore (142)** | *Ursidae* | 4/15 |
|  | *Acinonyxjubatus* | 0/15 |
|  | *Pantheraleo* | 0/10 |
|  | *Otarriinae* | 0/11 |
|  | *Vulpes zerda* | 0/9 |
|  | *Panthera tigris altaica* | 0/9 |
|  | *Panthera tigris* | 0/5 |
|  | *Panda* | 0/4 |
|  | *Ailurus* | 0/6 |
|  | *Procyonlotor* | 0/12 |
|  | *Canislupus* | 0/19 |
|  | *Canis* | 0/27 |
| **Herbivore (190)** | *Elephas maximus* | 0/5 |
|  | *Hippopotamus* | 0/6 |
|  | *Vicugna pacos* | 0/18 |
|  | *Macropodidae* | 0/16 |
|  | *Equus quagga* | 0/13 |
|  | *Damaliscus dorcas* | 1/12 |
|  | *Oryx* | 1/19 |
|  | *Bos grunniens* | 0/10 |
|  | *Llama* | 0/10 |
|  | *Elaphurus davidianus* | 0/24 |
|  | *Cervus nippon* | 0/21 |
|  | *Connochaetes* | 0/11 |
|  | *Dicerorhinus* | 0/8 |
|  | *Budorcas taxicolor* | 0/17 |
| **Birds (138)** | *Phoenicopteridae* | 0/14 |
|  | *Nipponia nippon* | 0/12 |
|  | *Emperor Penguin* | 0/11 |
|  | *Cygnus atratus* | 0/14 |
|  | *Psittaciformes* | 0/24 |
|  | *Cygnuscygnus* | 0/12 |
|  | *Eudocimus ruber* | 0/6 |
|  | *Grusvipio* | 0/3 |
|  | *Ramphastos sulfuratus* | 0/6 |
|  | *Asseriformes* | 1/15 |
|  | *Dromaius novaehollandiae* | 1/21 |
| **Reptiles (9)** | *Lizard* | 0/9 |
| **Others (9)** | *Myrmecophaga tridactyla*  | 1/9 |

Table S2 *G. duodenalis* assemblage B subtypes at the *gdh*, *tpi* and *bg* loci.

|  |  |
| --- | --- |
| Accession no. | *bg* |
| Position | 322 |
| KJ888974 |  | A |
| MT811038 |  | G |
|  | *gdh* |  |
| Position | 132 | 438 | 447 | 486 |
| KM977648 |  | C | G | G | C |
| MT811040 |  | C | A | A | C |
| MT811039 |  | T | G | G | T |
|  | *tpi* |  |
| Position | 77 | 153 | 175 | 250 | 382 | 522 |
| MF095053 |  | T | C | A | G | G | T |
| MT811043 |  | T | C | G | G | G | G |
| MT811045 |  | C | C | G | G | G | T |
| MT811041 |  | T | T | A | G | G | G |
| MT811042 |  | T | C | A | A | G | G |
| MT811044 |  | T | C | A | A | A | T |