

Assessing Peste des Petits Ruminants Viral Spillover Potential in Central Asia

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Introduction

The peste des petits ruminants virus (PPRV), also known as ovine Rinderpest is a highly contagious viral disease affecting domestic and wild small ruminants. The virus belonging to the Morbillivirus genus, is closely related to other highly contagious diseases that affect a wide range of mammals including humans (Kul *et al.*, 2007). Morbilliviruses are often referred to by their common names rather than their scientific names. For example, Morbillivirus hominis, the causative agent of measles, is commonly called the measles virus (MeV). The same goes for other common Morbillivirus species, of which the most well-known include canine distemper virus (CDV), phocine distemper virus (PDV), feline Morbillivirus (FeMV), cetacean Morbillivirus (CeMV), and Rinderpest virus (RPV), which devastated domestic cattle populations until its eradication in 2011 (Roeder, Mariner and Kock, 2013). Many of these viruses are associated with epizootics (animal epidemics) that result in large sudden population declines, such as seen in saiga antelopes (*Saiga tatarica*) in 2017. In that year, a large loss of population was attributed to PPRV following an unrelated die-off in 2015 that left the species population at increased risk of extinction (Freimanis and Orynbayev, 2019; Akimzhanov and Bekzhanov, 2023). Such epizootics can also affect humans directly or indirectly. The biggest human risks usually entail livestock becoming infected and thereby affecting human food security and livelihoods. Though less likely, these viruses can directly impact humans through zoonotic transmission (animal-to-human transmission). Human populations with frequent contact with animals, such as veterinarians, herders and farmers are at highest risk and could serve as a viral "gateway" to the rest of the human population (Klous *et al.*, 2016). Such an event is thought to have happened in the evolution of measles, which possibly evolved from a spillover event of Rinderpest in the middle ages (Düx *et al.*, 2020). The objective of the following paper is to provide a phylogenetic oversight of Morbilliviruses using RNA polymerase sequences, then select one focal mammalian host from the phylogeny that could play a role in potential spillover events to related animals in the same region. Lastly, the risk of potential zoonotic transmissions from all animals in question will be analyzed by comparing human population density to each animals extant range.

Methods and Results

To build a phylogenetic and compare genetic similarity, 19 different Morbillivirus species were identified on the NCBI database in addition to two related outgroup viruses (Nipah- and Hendra virus). The L gene (coding for the RNA-dependent RNA polymerase) was selected for this analysis since it is highly conserved among Morbilliviruses and provides robust phylogenetic insights (Sourimant and Plemper, 2016). Each viral L gene was identified using the NCBI ORF finder, then the corresponding nucleotide sequence (in FASTA format) was pasted into a document that was used for sequence alignment (see appendix for alignment). Clustal Omega was used for both the sequence alignment and phylogenetic tree, though this was visualized and edited using iTOL (fig. 1).

Tree scale: 0.1

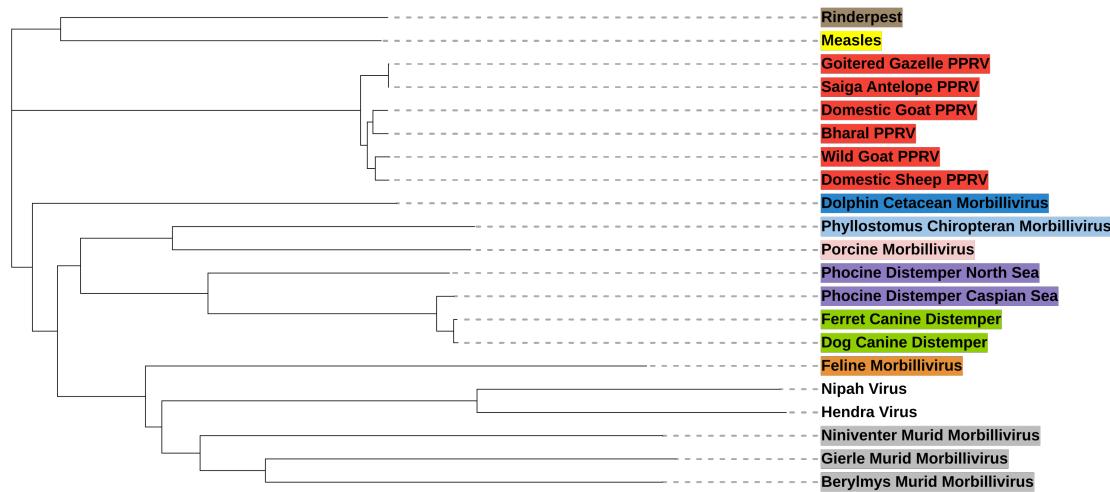


Figure 1: Phylogenetic tree of Morbilliviruses with Nipah/Hendravirus as outgroups. Morbilliviruses of the same species are colour coded to match.

The resulting tree visualizes the sequence alignment and the evolutionary relationships between each virus strain, with branch lengths showing the degree of genetic divergence. As expected, the aforementioned close relationship between measles and Rinderpest is supported by the alignment and most strains found within the same taxonomy are closely related, such as all murid (mice and rats), canine and bovine strains. This reflects the minimal genetic adaptation required to jump host species when both host species are closely related, which generally supports the notion that Morbilliviruses exhibit a degree of host specificity (Nambulli *et al.*, 2016). Another noteworthy relationship is observed between the strains of phocine distemper (PDV). The strain found in the Caspian Sea shows a closer genetic relationship to canine distemper rather than the other strain of phocine distemper found in the North Sea. This is likely because there is no feasible route of transmission from one sea to the other, instead it is more likely for a caspian seal to get infected by more proximate hosts that are still somewhat closely related (in this case, other carnivorans such as dogs or ferrets). This possibly highlights how geographic barriers and host availability can shape viral evolution and transmission (Jo *et al.*, 2019). Building on these observations, the Goitered Gazelle (*Gazella subgutturosa*) was chosen for further analysis of PPRV. Several other hosts in the tree were closely related, and the Goitered Gazelle had the largest range out of all PPRV hosts. This range increases the likelihood of interactions with multiple species thereby facilitating the spread of the virus to a wider variety of animals, some of which are at elevated risks of extinction. To assess the risks of transmission between host species, 9 related proximate animals (all of which are in the family *bovidae*) were chosen to compare distribution overlap and subsequent spillover risk. All species of concern were chosen based on a combination of regional proximity, evolutionary relationship to the focal species and risk of extinction. Using shp files gathered from each animals IUCN page, maps were created using GIS techniques in R (fig. 2, fig. 3).

When compared to each species individually, the risk of cross-species transmission based on range overlap is lowest in the Himalayan Tahr (*Hemitragus jemlahicus*) and the Markhor (*Capra falconeri*) since both ranges either barely overlap or do not overlap with that of the Goitered Gazelle. Both are additionally shielded from interactions with the focal species since they reside in the Hindu Kush and Himalayan mountain ranges, some

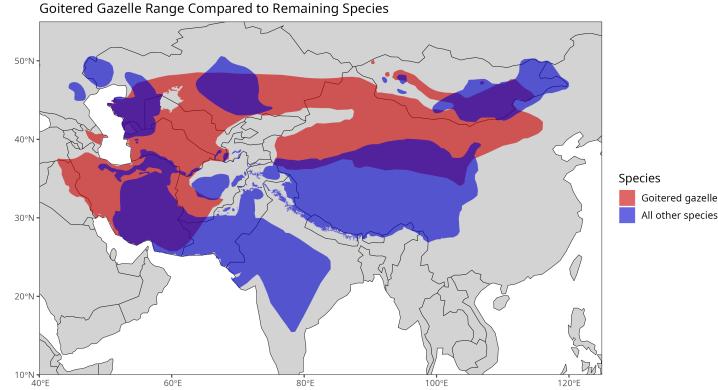


Figure 2: Comparison of the Goitered Gazelle's range (red) with all other species combined (blue).

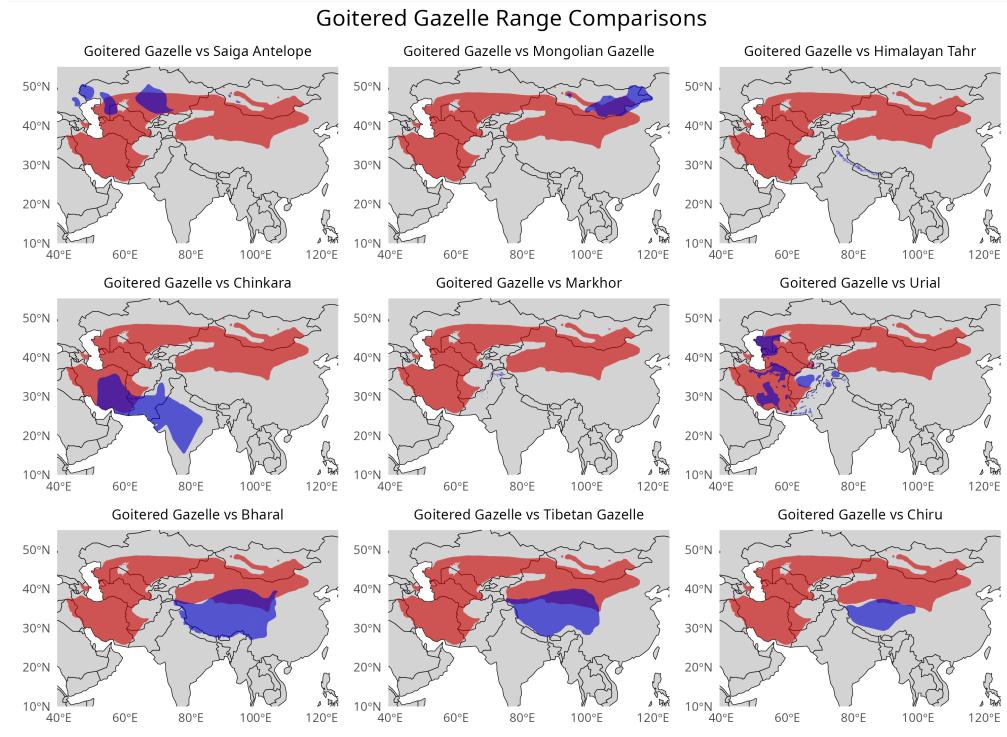


Figure 3: Comparisons of the Goitered Gazelle's range with individual species.

of the highest mountain ranges on earth (Wheeler and Waller, 2008). Similarly, the species confined to Tibet (Bharal (*Pseudois nayaur*), Tibetan Gazelle (*Procapra picticaudata*) and Chiru (*Pantholops hodgsonii*)) have a degree of shielding as the Tibetan plateau also represents a significant barrier for transmission. All remaining species share a significant range overlap without much of a barrier in between species preventing interactions. From an evolutionary perspective, the Antelopinae subfamily, which includes species such as the Mongolian Gazelle (*Procapra gutturosa*), Tibetan Gazelle, Chinkara (*Gazella bennettii*), Saiga Antelope, and Chiru, poses the highest risk of cross-species transmission. These species are extremely closely related to the Goitered

Gazelle, reducing the genetic and immunological barriers required for PPRV to establish infections (Benfield *et al.*, 2021). The remaining species are all part of the subfamily Caprinae, which is less closely related but still close enough for cross-species transmission to occur frequently. When considering the severity of a potential outbreak, the conservation status is a critical factor (Smith, Acevedo-Whitehouse and Pedersen, 2009). All species other than the focal species and urial are either classed as near threatened (NT) or least concern (LC) by the IUCN. Both the goitered gazelle and the Urial (*Ovis vignei*) however, are classed as vulnerable, meaning that cross-species infections would push a species already classed as vulnerable closer to extinction (table 1).

Species	Overlap Area (km ²)	Total Range (km ²)	Overlap Percentage (%)
Saiga Antelope	498,155.75	747,659.90	66.63
Mongolian Gazelle	375,772.95	713,981.28	52.63
Himalayan Tahr	0.00	55,897.38	0.00
Chinkara	891,422.12	2,769,400.58	32.19
Markhor	836.33	25,330.49	3.30
Urial	777,299.14	1,045,799.69	74.33
Bharal	624,916.66	2,859,976.09	21.85
Tibetan Gazelle	661,481.24	2,395,180.33	27.62
Chiru	58,594.06	1,091,277.78	5.37

Table 1: Overlap between the Goitered Gazelle and other species, showing overlap area, total range, and how much the Goited Gazelles range overlaps the range of the species in question as a percentage.

Species	Mean Density	Median Density	Min Density	Max Density	Amount of Top 5% Cells
Goitered Gazelle	27.17	3.07	0	33,526.63	9,635
Saiga Antelope	2.97	1.28	0	121.45	0
Mongolian Gazelle	0.95	0.26	0	2,290.96	29
Himalayan Tahr	69.19	31.19	0	1,820.69	338
Chinkara	192.95	75.63	0	57,831.89	50,620
Markhor	92.67	34.48	2.59	1,250.57	391
Urial	56.56	13.16	0	11,329.02	3,629
Bharal	15.08	1.10	0	23,368.08	1,989
Tibetan Gazelle	8.03	0.65	0	16,225.09	758
Chiru	1.06	0.06	0	675.93	6

Table 2: Summary of human population density metrics and top 5% human population cells for each species' range.

From a human risk perspective, most species are far from major urban and thus pose little threat to humans even if they were to be infectious to livestock or humans themselves. The one exception is the Chinkara, since this species has a habitat that ranges from central Iran to central India, crossing some of the world most densely populated areas on planet across Pakistan and India. Around a third of the Chinkaras range overlaps with the Goitered Gazelle and it contains over 50 thousand high-population cells, a figure five times higher than the second most cells from the Goitered Gazelle (around 9600 cells, table 2). The average population density across the Chinkaras range (192 people per km²) is comparable to the entire country of Italy (195 people per km²) (Benassi and Naccarato, 2019). This makes the Chinkara an important focal species for potential spillover, particularly as its range overlaps heavily with areas where livestock, especially domestic goats (which are closely related to the Chinkara) are prevalent. Although direct transmission to humans remains unlikely, the Chinkaras range overlaps some extremely densely populated areas significantly increasing the odds of zoonotic transmission. Beyond the Chinkara, only the Goitered Gazelle, Bharal and Urial have significant overlap with high-density human population cells, all other species are mostly not of concern to human populations and their livestock due to being confined to less populated or geographically isolated areas.

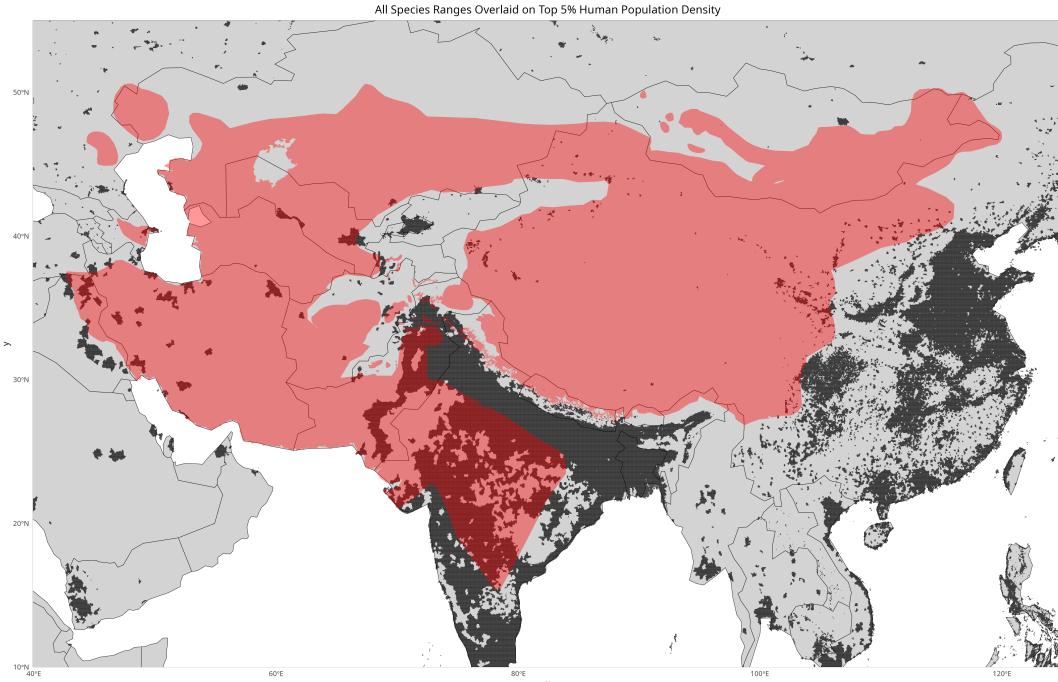


Figure 4: Overlay of human population density (black) with all species ranges combined (red), highlighting areas of potential interaction.

Possible Mitigation Strategies

The two main problems identified in this analysis are: 1. Cross-species transmission to the Urial, which could severely impact its vulnerable population. 2. Spillover to livestock or humans via the Chinkara, given its extensive overlap with densely populated regions. In both cases, vaccinating animals against PPRV represents an effective strategy. Vaccinations have proven to be effective in dealing with similar morbilliviruses in the past, such as Rinderpest which was eradicated in large part due to vaccination campaigns (De Swart, Duprex and Osterhaus, 2012). Though this strategy would be easier to apply to livestock such as goats (since they do not need to be captured first), it can be applied to wild animals too. Urials represent a good candidate for this due to their highly fragmented populations that could achieve herd immunity in each population pocket, thus reducing the risk of widespread outbreaks (Breed, Plowright and Hayman, 2009). Existing PPRV vaccines are known to effectively protect animals against the virus, but developing countries such as those in central and southern Asia might struggle to implement large-scale vaccination programs due to financial and logistical challenges (Kardadjad and Luka, 2016; Jia *et al.*, 2020). In terms of preventing the spread of PPRV in wild animals, governments and organizations should ideally aim to maintain surveillance of populations at risk. If an outbreak can be detected early, the infected population can be quarantined and the infected can be culled if needed. Even better would be to prevent species at risk from getting close to the virus at all, which can be helped with fencing and an appropriate buffer zone between livestock and wildlife (Niedbalski, Fitzner and Kesy, 2023). The main mitigation strategy would also ideally involve some degree of education for those at risk. This could include educating farmers and herder on symptoms of PPRV, containment measures and vaccination benefits. In addition, involving local communities in surveillance, reporting and mitigation efforts can greatly benefit wild and domestic life at risk of PPRV infection. Effectively mitigating the risks posed by PPRV requires a multi-faceted approach that combines vaccination campaigns, early detection and containment, habitat management, and community education. While livestock-focused efforts are critical, targeted interventions for wild species, such as the Urial and Chinkara, are equally important.

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Other Sources

<https://www.ncbi.nlm.nih.gov/> - used to find sequences to align

<https://www.ebi.ac.uk/jdispatcher/msa/clustalo> - used to align sequences and make tree

<https://itol.embl.de/> - used to visualize and annotate tree

<https://www.iucnredlist.org/> - used to find redlist status, shp files and evolutionary relationships

<https://earthdata.nasa.gov/data/catalog/sedac-ciesin-sedac-gpwv4-popdens-r11-4.11> - used for human population data (2020)

Appendix: Alignment Results:

CLUSTAL O(1.2.4) multiple sequence alignment

Hendra		AGGACCCAAGTCCTTAAACGTGCATG---
AATTT	57	ATTGAGATAGTCAGAAATTGGAGCT
Nipah		AGGACCCAGGTCTTGATTATGCCAATTTCTCGAGAAATCATTCAATTGACCAT
AGACT	60	-----
Niniventer		-----
-----	0	-----
Berylmys		-----
-----	0	-----
Gierle		-----
-----	0	-----
Feline		-----
-----	0	-----
Dolphin		-----
-----	0	-----
Saiga_antelope,		-----
-----	0	-----
Goitered_gazelle,		-----
-----	0	-----
Domestic_sheep,		-----
-----	0	-----
Wild_goat,		-----
-----	0	-----
Bharal,		-----
-----	0	-----
Domestic_goat,		-----
-----	0	-----
Measles		-----
-----	0	-----
Rinderpest		-----
-----	0	-----
Phocine_distemper_north_sea		-----
-----	0	-----
Phocine_distemper_caspian_sea,		-----
-----	0	-----
Dog_canine_distemper		-----
-----	0	-----
Ferret,		-----
-----	0	-----
Porcine		-----
-----	0	-----
Phyllostomus		-----
-----	0	-----

Hendra		GAAT-ACTAGT-GAGTAAATTAGGAGTAGTAGTATTGAACCACCTCATATCTTAT
TTCTT	115	GAAAGCGTTGTTACCTAGTTCTTCAGAAGAGATCTTATTAGAAT-----TAATT
Nipah		-----
ATATG	115	-----
Niniventer		-----
-----	0	-----
Berylmys		-----
-----	0	-----
Gierle		-----
-----	0	-----
Feline		-----
-----	0	-----
Dolphin		-----
-----	0	-----
Saiga_antelope,		-----
-----	0	-----
Goitered_gazelle,		-----
-----	0	-----
Domestic_sheep,		-----
-----	0	-----

Wild_goat,
----- 0
Bharal,
----- 0
Domestic_goat,
----- 0
Measles
----- 0
Rinderpest
----- 0
Phocine_distemper_north_sea
----- 0
Phocine_distemper_caspian_sea,
----- 0
Dog_canine_distemper
----- 0
Ferret,
----- 0
Porcine
----- 0
Phyllostomus
----- 0

Hendra
TATCT 175
Nipah
AATAT 175
Niniventer
AATTC 34
Berylmys
AGTGG 34
Gierle
GGTAT 34
Feline
CTACC 41
Dolphin
AATCA 19
Saiga_antelope,
AGTCA 19
Goitered_gazelle,
AGTCA 19
Domestic_sheep,
AGTCA 19
Wild_goat,
AGTCA 19
Bharal,
AGTCA 19
Domestic_goat,
AGTCA 19
Measles
TGTCA 41
Rinderpest
TGTCA 19
Phocine_distemper_north_sea
TGTGA 41
Phocine_distemper_caspian_sea,
AGTGA 19
Dog_canine_distemper
AGTGA 19
Ferret,
AGTGA 19
Porcine
AGTTA 19
Phyllostomus
GGTGA 19

CTGAAC TG CATT AAA ATT GT ACC CAGG AT A CA AC AT GG CT CAT GA ATT ATC
ATCTA ATT CCCTT AAA ACT GA A TAC CAAA A CAAA AT GG CC GAT GA ATT ATC
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----- ATGTTCGGCCCTGAAGAGCTCTGGATT
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----- ATGGAGTCCATCTC
----- ATGGACTCTCTATC
----- ATGGACTCTCTATC
----- ATGGACTCCCTATC
----- ATGGACTCTGTGTC
----- ATGGACTCTGTATC
----- ATGGACTCTGTATC
----- ATGGACTCTGTATC
----- ATGGAGTCCATATC

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Nipah		CCGACATCATTACCCCTGAATGTCATTGGATAGTCCTATAGTCTCTGGTAAACT
AATAT	235	
Niniventer		AACAAATATTATATCCAGAAGTACATCTAGATAGTCCATTGTCAGTCTAAATT
CGTAG	94	
Berylmys		CTTCTATCATTATCCAGAAGTACATCTAGACAGCCCTATAGTTACATCTAAATT
GGTTT	94	
Gierle		CTTCTGTTATCTACCCCGAGGTCCATCTGACAGTCCTATAGTTACATCCAAGCT
TGTCT	94	
Feline		AAGATATTCTATACCCGGAAGTACATCTAACAGTCCTATAGTAATTCCAAATT
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Dolphin		ACCAGATCCTATACCCCTGAAGTGCACCTGGATAGTCCTATAGTCACTAATAAGTT
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Bharal,		ATCAGGTCTTGTACCCCTGAGGTCATCTAGACAGCCCTATTGTCACAAACAAACT
AGTTG	79	
Domestic_goat,		ATCAGGTCTTGTACCCCTGAGGTCATCTAGATAGCCCTATTGTCACAAACAAACT
AGTTG	79	
Measles		ACCAGATCTTATACCCCTGAAGTTCACCTAGATAGCCCGATAGTTACCAATAAGAT
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Rinderpest		ACCAAATTGTACCCGGAGGTGCACCTGATAGCCCGATAGTGAACAAAGCT
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AGTTG	101	
Phocine_distemper_caspian_sea,		ACCAGATTCTATACCCCTGAGGTCATCTAGATAGCCCAATTGTAACCAATAAGCT
AGTAG	79	
Dog_canine_distemper		ACCAGATTCTATACCCCTGAGGTCATCTAGATAGCCCAATTGTAACCAATAAGCT
AGTAT	79	
Ferret,		ACCAGATTCTATACCCCTGAGGTCATCTAGATAGCCCAATTGTAACCAATAAGCT
AGTAT	79	
Porcine		ACCAGATTCTCTACCCGGAAAGTCATCTGACAGCCCCATCGTGACCAATAAGTT
AGTAG	79	
Phyllostomus		ATCAAATTCTCTACCCCTGAAGTCACTTAGACAGTCGGATCGTGACTAATAAGCT
TGTGG	79	

Hendra		CAGCTATAGAATATGCGCAGTTGAGACATAACCAACCGAATGGGGACAAGAGATT
AACTG	295	
Nipah		CAGCTATTGAATATGCTCAATTGAGACACAATCAGCCCAGTGATGATAAAAGACT
GTCTG	295	
Niniventer		CCTATCTAGAATATGCAGGAGTACCCACACAACCAAACCTCTACATGATCTAACAAAT
TGTGG	154	
Berylmys		ATCACTTGGAGTATGCTGAGCTGCCTACAATCAACATCTGTATGATCAAACATT
GATCA	154	
Gierle		ACCATCTTGAATATGCAGGACTGACTTATAACCAGGAACGTGTTAGACCCTACAAAT
TGTGA	154	
Feline		GTATTTAGAATACGCCAAATTGCTCATATAACAAATTATCAGACCGTACAAT
TATCA	161	
Dolphin		CTATACTGGAGTACTCTGGGTAAACCATGGGTACATTCTGGAGGATCAGACATT
GACAA	139	
Saiga_antelope,		CCATCCTTGAGTACTCGGGTATCGACCATAACTATGTTCTGAAGACCAGACTCT
TGTCA	139	
Goitered_gazelle,		CCATCCTTGAGTACTCGGGTATCGACCATAACTATGTTCTGAAGACCAGACTCT
TGTCA	139	
Domestic_sheep,		CCATCCTTGAGTACTCGGGTATCGACCATAACTATGTTCTGAAGACCAGACCCCT
TGTCA	139	
Wild_goat,		CCATCCTTGAGTACTCGGGTATCGACCATAACTATGTTCTGAAGACCAGACCCCT

TGTCA	139	CCATCCTGAGTACTCGGGTATCGACCATAACTATGTTCTGAAGACCAGACCT
Bharal,		CCATCCTGAGTACTCGGGTATCGACCATAACTATGTTCTGAAGACCAGACCT
TGTCA	139	CTATCCTGGAGTATGCTCGAGTCCCTCACGCTTACAGCCTGGAGGACCTACACT
Domestic_goat,		CCATATTAGAGTATGCCGGATCCCACATAAGTACGTCTCGAGGATCCAACCT
TGTCA	139	CTATTCTGAGTATGCGCGGATTAAGCACAACCTACACTGATACCACATT
Measles		CTATTTAGAATAACGCACGAATTAGACATACTACAGCTCCTGATACAACATT
GTGTC	161	CTATTTAGAATAACGCACGAATTAGACATAACTATCAGCTCCTGATACAACATT
Rinderpest		CTATTTAGAATAACGCACGAATTAGACATAACTATCAGCTCCTGATACAACATT
CTGCA	139	CTATCCTAGAGTATGCCAATCTAAATCACAACCTACAGCTGATAGACCCGACCT
Phocine_distemper_north_sea		GAATCCTAGAATAACGCAAACCTAAACATAACTACCAATTGACCGATCCTACTAT
AGTGC	161	* * * * * * * * * * * * * * *
Phocine_distemper_caspian_sea,		
AGTGC	139	
Dog_canine_distemper		
AGTGC	139	
Ferret,		
AGTGC	139	
Porcine		
TATTG	139	
Phyllostomus		
AATTG	139	

Hendra		AAAATATCAAAATTAACCTACAGGGCAAAAGAAGAAGTGTGTATATCCAGACA
ATCTA	355	AGAATATTAGTTAACCTTCACGGGAAAAGAAAGAGTCTATACATATTAAGACA
Nipah		AAAATATAAGACATAGGAAGAATACCCATTCAACTCCCTCTGATTGCTACATT
ATCCA	355	AGAATATTACATACAACAAGATAAATGGCGCAACCACCTGACAGCAGGATT
Niniventer		AGAACATCAGGCACAATCTCTAACACGAGGCTACTCCATCTAACATCAAGCTT
ATCAC	214	AGAATATTCAATTAGGATTAAGGAACGGATTAATAGTTCAAGGGTACAGGTACT
Berylmys		AGAATATTCTCGCTATAGGTCGAGAATGGTTACTCCAATCAAATGATTATAAATAA
AGTAC	214	AGAATATTAGGTATAGGCTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Gierle		AGAATATTAGGTATAGGCTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
AGCAA	214	AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Feline		AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
ATCAG	221	AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Dolphin		AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
CCTCG	199	AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Saiga_antelope,		AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
CAGGG	199	AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Goitered_gazelle,		AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
CAGGG	199	AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Domestic_sheep,		AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
CAGGG	199	AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Wild_goat,		AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
CAGGG	199	AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Bharal,		AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
CAGGG	199	AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
Domestic_goat,		AGAATATTAGGTATAGACTGGGTGCGGTTTCAAATCAAATGATCATCAATAA
CAGGG	199	AGAACATCAAGCACCGCTAAAAACGGATTCTCAAACCAAATGATTATAAACAA
Measles		AAAATATAAGCATCGCTAGATAGCGGTTTCAAATCAGATGATCATCAACAA
TGTGG	221	ACAATATAAGAGAAAGGATTACAGAAGGGTTATCAAATCAGATGATAATTGATTG
Rinderpest		GTAATATCAAAGAGAGAATTTCAGAAGGGTTCTCAAACCCAGATGATCATTAAC
TGTTG	199	GTAATATCAAAGAGAGAATTTCAGAAGGGTTCTCAAACCCAGATGATCATTAAC
Phocine_distemper_north_sea		GTAATATCAAAGAGAGAATTTCAGAAGGGTTCTCAAACCCAGATGATCATTAAC
CATAG	221	AGAATATTAAACAGCGGATCAATGAAGGATACTCCAACCAAATGATCATCAACTA
Phocine_distemper_caspian_sea,		ACAATATCAGACATCGTGTAAATGAAGGTTATTCTAACCAAGTAATCATCAACCA
CATCG	199	
Dog_canine_distemper		
CATCG	199	
Ferret,		
CATCG	199	
Porcine		
TATCA	199	
Phyllostomus		
TGTAA	199	

Hendra		GACTTGGAAATTACATTAGAGACAATATAAAGAATTGAGGAATTCTACATGT
ATCAT	415	AACAGGGTGAATTACATTAGAAACAACATAAAAACCTAAAGGAATTCTACATGT
Nipah		AGTATGGAAGAACAACTCATTAGGAATTACAATACCTGAGAAATCCAAACATAT
TGCGT	415	ACTATGGTGAACAAGTTAAGAAGGCAGTGATTCCATTAAAAATGCCTGCATAT
Niniventer		GATTGGGAACAAGTCACCGTTGTCTATTGGAGTATTCCAAGATCGTCATGT
CCCTT	274	CTATGGTGAAATTATCAACAAATTAGAAATAATCCTAATTATTTACACAT
Berylmys		AAATTGGGAATGTGGTAAATCTAAGACTCATGAGTTACCCCTACCACAGGCACAA
ACCAT	274	GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
Gierle		GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
ACCTT	274	GGGTGGGTGAAACAGTCATTCTAAACTCAAAAGTTACCCCCATAATCGTCATAT
Feline		GGTTGGGTGAAACAGTCATTCTAAACTCAAAAGTTACCCCCATAATCGTCATAT
ACCTT	281	GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
Dolphin		GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
GATCT	259	GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
Saiga_antelope,		GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
CATAT	259	GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
Goitered_gazelle,		GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
CATAT	259	GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
Domestic_sheep,		GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
CATAT	259	GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
Wild_goat,		GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
CATAT	259	GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
Bharal,		GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
CATAT	259	GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
Domestic_goat,		GGGTGGGTGAAACAGTCATTCTAAACTTAAAGTTACCCCCATAATCGTCATAT
CATAT	259	AAGTTGGGAATGTCATCAAGTCAAGCTTAGGAGTTATCCGGCCACTCTCATAT
Measles		AGATAGGGAAATGTTGCCAATCCAAACTCAAAGGTATCCGAACCATGAGCACAT
TCCAT	281	AAATTGGAAGTATTATCAACCAAACATTACTGTCTACCCCTCAATACAAACATGT
Rinderpest		AAATCGGGAGCATTATTAATCAGACCTGTTATCTTATCCAAACACAACCATGT
CCCAT	259	AAATTGGGAGCATTATTAATCAGACCTGTTATCTTATCCAAACACAACCATGT
Phocine_distemper_north_sea		AAATTGGGAGCATTATTAATCAGACCTGTTATCTTATCCAAACACAACCATGT
GATAT	281	ACGTCGGACACATCATAATGATCTACTGGCTACTTGCCTAAAACAACATCATAT
Phocine_distemper_caspian_sea,		ATGTTGGGTGCGTTATCAATGATCTACTGAACACATAACCAAAACTCATAT
GATAT	259	*** * ***
Dog_canine_distemper		
GATAT	259	
Ferret,		
GATAT	259	
Porcine		
TCTGT	259	
Phyllostomus		
TCCTT	259	

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Hendra		ATCCCGAGTGCAATAATCTTATTCTCTCAAGTCTCTGGAAATGACAAGTAA
GTTGA	475	ACCCCTGAATGCAATAACATTCTATTCTCCATCACATCCAAAGGCATGACTAGCAA
Nipah		ATCCTAATCATAATAAGGAATTATTAATCTTATGATAATTCTCTAACTACAAA
ACTTG	475	ACCCCCACTGTAATCAAAGGTTATTAATTATCATGATATCAATCTGTCTTATAG
Niniventer		ATCCTGAGTGCAACTAAAGCTTTGCAGCCTCAGATAGGAGCCTGTAACTCG
ATTAG	334	ACCCCTGAATGCAACCAAAAAACTATTCGAATAGTAGATCCAGAACTAACATCAA
Berylmys		ACCCCGACTGTAATTATGACCTATTCCATATTCTGATCATCAAATTCTTCCAG
ATTAT	334	ACCCGGATTGCAATAAGGAGTTGTTGTATCAAGGATAGCTGCATATCTAAGAA
Gierle		GCCCGGATTGCAATAAGGAGTTGTTGTATCAAGGATAGCTGCATATCTAAGAA
ACTCA	334	ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
Feline		ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
ATTAG	341	ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
Dolphin		ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
GCTGT	319	ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
Saiga_antelope,		ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
GCTCT	319	ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
Goitered_gazelle,		ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
GCTCT	319	ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
Domestic_sheep,		ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
GCTCT	319	ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
Wild_goat,		ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA
GCTCT	319	ACCCGGATTGCAATAAGGAGTTGTTGTATCAAAGATAGCTGCATATCTAAGAA

Bharal,	ACCCGGATTGCAATAAGGAGTTGGTATCAAAGATAGCTGCATATCTAAGAA
GCTCT 319	
Domestic_goat,	ACCCGGATTGCAATAAGGAGTTGGTATCAAAGATAGCTGCATATCTAAGAA
GCTCT 319	
Measles	ATCCAAATTGTAATCAGGATTATTAACATAGAAGACAAAGAGTCACAAAGGAA
GATCC 341	
Rinderpest	ATCCAGAATGCAACCAAGAGTTGTTCAATGCTCGGGATAAGAAGGCTACGGAGAA
AATTG 319	
Phocine_distemper_north_sea	ACCCGAATTGTAACAAGTCATTGTTCACGCACAAGATCAAATTATCTCTTTAA
GTTGA 341	
Phocine_distemper_caspian_sea,	ACCCAAATTGCAACAAACTCTATTCATGCACAGGATCGAGTCATCTCTGAG
GCTGA 319	
Dog_canine_distemper	ACCCAAATTGCAACAAACTCTATTCATGCACAGGATCGAGTCATCTCTGAG
GCTGA 319	
Ferret,	ACCCAAATTGCAACAAACTCTATTCATGCACAGGATCGAGTCATCTCTGAG
GCTGA 319	
Porcine	ATCCTAATTGTAATAAAGATCTGTTAGGGCAGAAGATGCGTTGGTTACTCAAAA
ATTGC 319	
Phyllostomus	ATCCAGAGTGTAAATCAAGCATTATTTAGGGCGATGATCCGTTAGTTACTCAAAA
ATTGT 319	

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*	
Hendra	GTAATATCATGAAGAAATCATTAAAGCATAATATCGTGAGCAGAAAAATCAT
AGAGA 535	
Nipah	ATAACATCATGAAAAAGTCATTCAAAGCATAATATCATTAGTAAGAAAGTAAT
TGGGA 535	
Niniventer	AAGGGCTCTCAAAAAGGAAAAATGCATATAACAAGATTAATACTCCCTACT
CAATT 394	
Berylmys	TACATATTCTATAAGTATGCCAACGTGGTTATAAGATTAGTCCTCAACTTAT
TAGGT 394	
Gierle	CAAACATACATAAGGATGCTAACCGCAGCTATGGCAAGATCTAGCTCTTGT
TGATT 394	
Feline	AATCTCTCTAAACAAAGGTGACACACTGTATCTAAGATTGATCAGATATCAT
AAAAT 401	
Dolphin	TAACCTATTCAAAAAGGAAATACAATATACTAAGATCAGCGAAAAATTAT
TGAAT 379	
Saiga_antelope,	CGGAGCTATTCAAGAAGGGTAATTCTTGACTCTAAGATAAGTCACCAGGTACT
GGATT 379	
Goitered_gazelle,	CGGAGCTATTCAAGAAGGGTAATTCTTGACTCTAAGATAAGTCACCAGGTACT
GGATT 379	
Domestic_sheep,	CGGAGCTATTCAAGAAGGGTAATTCTTGACTCTAAGATAAGTCACCAGGTACT
GGATT 379	
Wild_goat,	CGGAGCTATTCAAGAAGGGTAATTCTTGACTCTAAGATAAGTCACCAGGTACT
GGATT 379	
Bharal,	CGGAGCTATTCAAGAAGGGTAATTCTTGACTCTAAGATAAGTCACCAGGTACT
GGATT 379	
Domestic_goat,	CGGAGCTATTCAAGAAGGGTAATTCTTGACTCTAAGATAAGTCACCAGGTACT
GGATT 379	
Measles	GTGAGCTCTAAAAAGGGAAATCGCTGTACTCCAAAGTCAGTGATAAGGTTT
CCAAT 401	
Rinderpest	GATCCCTGTTAAAAAGGGGACCACCTGTACACCAAAATCAGTGATAAGTGTG
TACAT 379	
Phocine_distemper_north_sea	GAACATATTCAAGAGGGCAATAGTATCTATAGCAAATTACAGATGGGATCAA
AAGAT 401	
Phocine_distemper_caspian_sea,	GAAATATATTCAAAAGAGGAAATAGCATCTATAGCAAATAACAGACGGGTCAA
AAAAT 379	
Dog_canine_distemper	GAAATATATTCAAAAGAGGAAATAGCATCTATAGCAAATAACAGACGGGTCAA
AAAAT 379	
Ferret,	GAAATATATTCAAAAGAGGAAATAGCATCTATAGCAAATAACAGACGGGTCAA
AAAAT 379	
Porcine	TAGATTGTTCAAGAAAGGAAACACGATATACGAAAATATCCGGAGGGATAAT
TAGAT 379	
Phyllostomus	TGGAATTATTCAAGAAGGGAAATGTCATCTACAGAAGATAGCCGGAGGTGTGGT
CACTT 379	

* * * * *

Hendra		TGTTACAAAACATCACCGAGAATCTCATAACTCAGGACAAAAGGATGAAGTTT
AGGTA	595	TGCTGAAAATATCACTAGAAATCTCATAACTCAAGATAGAAGAGATGAAATAAT
Nipah		GTATCAA-----AATAATCCAGCAAGATTGTGGAATAACAAATAAATT
TAATA	595	GCCTGCA-----GGAACTAGATCAATCTTAGGGTCAACACAAACTAT
Niniventer		GCCTTCG-----CTACCTCGATAAAAAGCTCGGTCAAAACAAGACAGT
GGATC	442	GTTTGAA-----TAGATTGAAAATGAAATATAAAGAATGATCT
Berylmys		GTATGAA-----GGGAGTGAATTCAAGGCTAGGGATAAGCAGTGATT
TACTA	442	GTCTTAA-----GAGAGTCAATGGAAATTAGGTCTGGCACAGATCT
Gierle		GTCTTAA-----GAGAGTCAATGGAAATTAGGTCTGGCACAGATCT
AGATC	442	GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
Feline		GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
TCTTA	449	GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
Dolphin		GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
AAGTA	427	GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
Saiga_antelope,		GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
TACCC	427	GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
Goitered_gazelle,		GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
TACCC	427	GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
Domestic_sheep,		GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
TACCT	427	GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
Wild_goat,		GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
TACCC	427	GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
Bharal,		GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
TACCC	427	GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
Domestic_goat,		GTCTTAA-----GAGAGTCAATGGAAATTAGGCCTGGCACAGATCT
TACCC	427	GTCTGAG-----GGACACTAACTCACGGCTTGGCTAGGCTCCGAATT
Measles		GTCTAGA-----GACTGCTAACTCAAGACTAGGATTGGGTGCCGACTT
GAGGG	449	GTCTAGT-----TAATATTAACTAAATATTGGTCTGGGTGAGACATT
Rinderpest		GCTTAAA-----CGATATTAATCTTAATATTGGTTAGGGGTGCACT
AGGAA	427	GCTTAAA-----CGATATTAATCTTAATATTGGTTAGGGGTGCACT
Phocine_distemper_north_sea		GCTTAAA-----CGATATTAATCTTAATATTGGTTAGGGGTGCACT
GGATA	449	GCTTAAC-----CAACCTTAATCAATCACTGGGTCTGGAGGCAATCT
Phocine_distemper_caspian_sea,		GCCTGAC-----AAAACCAACCAGTCGTTAGGTCTGGGAATGATAT
GGACA	427	*
Dog_canine_distemper		*
GGACA	427	
Ferret,		
GGACA	427	
Porcine		
CCCTG	427	
Phyllostomus		
TCCTG	427	

Hendra		TTTATGAGCAGGACAGACTCAGTAACATAGGGAAATACATGAGTCATCGCAATG
GTATG	655	TACATGAGTGTAGGCGATTAGGGGATTAGGAAAGAATATGAGTCATCTAAATG
Nipah		TCGAAACCACCCACAGGTTACTTAACCTGCCTCAATAGCTGAGCAATCTCGATG
GTATG	655	CACAAGTTAGATAAGATGCGTATCTCCTTAATCTATGAATCTTCAGTG
Niniventer		AATTCCCTCATAGATAAGGTAACTAATACCTCAGATTACGAGTCTCGCCATG
GTTTT	502	ATGACAATAGTCATTGATTCTAGATCTCCTTAATTATCAAAGGATCTCAGTG
Berylmys		AAGAAGTTACGACAGGGATCACAGATTGGGAGCCTACATGCAGAGTTCAATG
GTTCG	502	ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTGCACATGCATAGCTCTCAATG
Gierle		ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTGCACATGCATAGCTCTCAATG
GTTCG	502	ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
Feline		ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
GTTCG	509	ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTGCACATGCATAGCTCTCAATG
Dolphin		ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTGCACATGCATAGCTCTCAATG
GTATG	487	ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTGCACATGCATAGCTCTCAATG
Saiga_antelope,		ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTGCACATGCATAGCTCTCAATG
GTTCG	487	ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
Goitered_gazelle,		ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
GTTCG	487	ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
Domestic_sheep,		ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
GTTCG	487	ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
Wild_goat,		ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
GTTCG	487	ATGGTCTGAAGGAGGGTATCCTGACCTAGGGTACACATGCATAGCTCTCAATG
Bharal,		

GTTCG	487	ATGGTCTGAAGGAGGGTATTCTTGACCTAGGGTTGCACATGCATAGCTCTCAATG
Domestic_goat,		AGGACATCAAGGAGAAAATTATTAACCTGGGAGTTACATGCACAGCTCCCAATG
GTTCG	487	TTGGGATCAAGGAGAAAGATCTTGAGTCTAAGCTGTACATGCAGAGTTCCCAGTG
Measles		AAACAGTGAGAACAAACATAGATGAAGTCGGCATTGTTATGCAGAGCTCACAGTG
GTTTG	509	AGACTATTGGGACCAAAATTGATGAAGCAGGCATAATTATGCAAAGCTCACAGTG
Rinderpest		AGACTATTGGGACCAAAATTGATGAAGCAGGCATAATTATGCAAAGCTCACAGTG
GTATG	487	AAATCTACCATAACCCAATACAAGATTTAGGAGTTATGATGCAAAGTTCAAAGTG
Phocine_distemper_north_sea		TTCCCCCTTCAGAAATTGATACAGGATTTGGGGATAGTGTACAGTTCAAGGGT
GTTTG	509	
Phocine_distemper_caspian_sea,		
GTTCG	487	
Dog_canine_distemper		
GTTCG	487	
Ferret,		
GTTCG	487	
Porcine		
GTTCG	487	
Phyllostomus		
GTTTG	487	

**		
Hendra		AGTGTTCCTCTGGTCACAATCAAGACAGAGATGAGAGCTGTTATCAAGAA
CTCAC	715	
Nipah		AGTGTTCCTCTGGTTACTATCAAAACAGAGATGCGAGCAGTGATCAAGAA
TTCGC	715	
Niniventer		ACCCCTCTTATTTGGTTACAATTAAAACAGAAATACAGAAAAGTCATAAAACA
ATCTG	562	
Berylmys		AGCCATTCTATTTGGTTACTGTTAAAACAGAGCTCCGAAACTTATTAAGCA
GTCAG	562	
Gierle		AGCCATTGGCTGTGGTTACCATCAAGACTGAGCTAGAAAGCTAATCAAGGC
AACAA	562	
Feline		TCCCTTTTATTCTGGTTCTATCAAAACTGAAACTAGAAGCTGTATTGCCA
AAATC	569	
Dolphin		GGCCTTCTATATTGGTTACAATTAAAACAGAGATGCGGTCCATCATCAAATC
AGCTA	547	
Saiga_antelope,		AGACTTCTGTTCTGGTTCACTATCAAGACAGAGATGAGATCAATGATCAAAGA
ACAGT	547	
Goitered_gazelle,		AGACTTCTGTTCTGGTTCACTATCAAGACAGAGATGAGATCAATGATCAAAGA
ACAGT	547	
Domestic_sheep,		AGACTTCTGTTCTGGTTCACTATCAAGACAGAGATGAGATCAATGATCAAAGA
ACAGT	547	
Wild_goat,		AGACTTCTGTTCTGGTTCACTATCAAGACAGAGATGAGGTCAATGATCAAAGA
ACAGT	547	
Bharal,		AGACTTCTGTTCTGGTTCACTATCAAGACAGAGATGAGATCAATGATCAAAGA
ACAGT	547	
Domestic_goat,		AGACTTCTGTTCTGGTTCACTATCAAGACAGAGATGAGATCAATGATCAAAGA
ACAGT	547	
Measles		AGCCCTTCTGGTTACAGTCAAGACTGAGATGAGGTCACTGATTAAATC
ACAAA	569	
Rinderpest		AGCCATTCTGTTCTGGTTACGATCAAGACAGAAATGAGATCAACATCAAGTC
ATCAG	547	
Phocine_distemper_north_sea		AACCCCTCTTATGGTTACGATCAAACAGAAATGAGATCAGTGATTAAATC
TTCTA	569	
Phocine_distemper_caspian_sea,		AACCTTCCTCTATGGTTACAATTAAAACAGAAATGAGATCAGTGATTAAATC
CTCTA	547	
Dog_canine_distemper		AACCTTCCTCTATGGTTACAATTAAAACAGAAATGAGATCAGTGATTAAATC
CTCTA	547	
Ferret,		AACCTTCCTCTATGGTTACAATTAAAACAGAAATGAGATCAGTGATTAAATC
CTCTA	547	
Porcine		GTTCATTCTGTTCTGGTTACCATCAAACCGAGATGAGGTCTGTAATAAAATC
AAGTA	547	
Phyllostomus		AGCCTTCTTATTTGGTTACAATCAAACCGAAATGAGATCAGTAATAAAATC
CAATA	547	

Hendra

AGAAACCTAAGTTAGATCTGACTCTTGTATTATTATGAAAGATAATAACAT

GGAAA	775	AAAAGCCGAAATTCCGTTCAGATTGATAATAACACATGCGAGACAAAAGTAC
Nipah		TATCACAACGTGAGAAAGTATAATAGAGAAGATCCCGTTGTAATTGGAAATAGAGT
TGAAA	775	GTACTATGCAATCAAAATATATCCGAGTATATCCACACGCAGAGAGTCAAAGAAC
Niniventer		CTAACATTCACTGTAAATATACTCCTAGTTACCCGTCGGTTAAGGAACTAGGTT
AATCG	622	AAAAGACTCGTGTAGATCACAATATCGGCCTCACTTATCAGAGACTAAGAGAAT
Berylmys		CACACACAAGTCATAGACATAGGATAGTACCTCATTGTGCATGGTGAGAGATG
TATAG	622	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Gierle		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
TCATG	622	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Feline		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
TACAT	629	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Dolphin		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
TGAAG	607	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Saiga_antelope,		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
CGAGG	607	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Goitered_gazelle,		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
CGAGG	607	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Domestic_sheep,		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
CGAGG	607	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Wild_goat,		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
CGAGG	607	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Bharal,		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
CGAGG	607	CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
Domestic_goat,		CCCATATATGCCACAAGAGGAGGTATAACCCGACTTTGTGTCGGGGATGCATT
CGAGG	607	CCCATACTTGCATAGGAGGAGACACACCTGTATTCTCACTGGTAGTCAGT
Measles		TCCATACCACTGACCGACGAAGGTACGTACCCCTTTCTCCGGTGAETCATT
TGAGC	629	CCCAACAATTGTCGTAACAGTAAACAGAACCCCTATTTGTCAAAGGTGAATCGTT
Rinderpest		CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
TGAGA	607	CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
Phocine_distemper_north_sea		CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
TAAGG	629	CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
Phocine_distemper_caspian_sea,		CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
TAATG	607	CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
Dog_canine_distemper		CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
GAATG	607	CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
Ferret,		CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
GAATG	607	CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
Porcine		CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
CAAAA	607	CTCACAACTGTCGCAAGCGGAGGCAGAACCCCTGTCTTGAAAGGTGAATCATT
Phyllostomus		CTCAAACTTGTCAAGAAAAGAAGATACATTCCATCATTACAACGGAAAATT
CAAAA	607	
Hendra		TTGTAATGAACCCAAATCTGTCGATTTACAAAATGATAAGGATGGAAAGAG
GTTG	835	TAATCCTAAATCGAATCTTATCTGATTTCAAATCAGACAAACTGGAAAGAA
Nipah		TTATATTT-----AATCACTATTTATTACAATAGTAGATAAAAGTTAGACATGA
GTTG	835	TCCTATTC-----CACCTAATTGGTAACAATTATCAATAAGAATCTCAATC
Niniventer		TGCTTATG-----CACCCCTGGACTGATTGACTGATTGACAGAGATAATAGTCT
AGTTT	676	TGGTTGTT-----ACATCTGATCTGATTACAATATTGATCATTTAATAAAATG
Berylmys		TTTGATA-----TCTAGAGACTTGGTAACCATAATTAAATAAAAGGTACAAGA
GATTT	676	TGCTCGTA-----TCGCGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
Gierle		TGCTCGTA-----TCGCGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
TGTCT	676	TGCTTGTA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
Feline		TGCTCGTA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
TATAT	683	TGCTCGTA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
Dolphin		TGCTCGTA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
TATCT	661	
Saiga_antelope,		TTTGTGATA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
TGTCT	661	
Goitered_gazelle,		TTTGTGATA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
TGTCT	661	
Domestic_sheep,		TTTGTGATA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
TGTCT	661	
Wild_goat,		TTTGTGATA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
TGTCT	661	
Bharal,		TTTGTGATA-----TCACGAGACCTCGTTGTGATAATTGATAAGAATACCCAGTA
TGTCT	661	

Domestic_goat,	TGCTCGTA-----	TACAGAGACCTCGTTGTATAATTGATAAGAATACCCAGTA
TGTCT 661		
Measles	TGTTAAC-----	TCTCGTACCTTGTGCTATAATCAGTAAGGAGTCTCAACA
TGTAT 683		
Rinderpest	TTCTGATT-----	TCCCGCGATCTAGTGGCGATAGTACACAGGAGACTCCATCA
TGTGT 661		
Phocine_distemper_north_sea	TACTAGTA-----	TCCCGGGATCTAGTGCCTCATTGATCTTGCACAAATTATAG
TGTTT 683		
Phocine_distemper_caspian_sea,	TGTTAGTG-----	TCTAGGGACCTTGTATGTATTATTGATCTCACCAAGTCACAA
TGTTT 661		
Dog_canine_distemper	TGTTAGTC-----	TCTAGGGACCTTGTATGTATTATTGACCTCACCAAGTCACAT
TGTTT 661		
Ferret,	TGTTAGTC-----	TCTAGGGACCTTGTATGTATTATTGACCTCACCAAGTCACAT
TGTTT 661		
Porcine	TCCTTGTT-----	TCGAGAGACCTCGTTGCCTGTGAACCTTGCTGACAAGAG
GGTTT 661		
Phyllostomus	TTTTGGTC-----	TCAAGGGACATGGTTGTCTGGTAACATTGGAGGGAGGTAG
GGTCT 661		

* * * *

Hendra	ACTACCTTACACCAGAAATTGTTCTAATGTGTTGTATGTCTTGGAAAGGCCGGAT
GATGA 895	
Nipah	ATTATCTTACACCCGAAATGGTCTAATGTATTGTATGCTCTAGAGGAAAGGAT
GATGA 895	
Niniventer	ATTACTTGACCTTCGAAATGGTCTAATGTTCTGTATGTTATTGAGGGTAGGCT
TCAAT 736	
Berylmys	ATTATTTGACTGTTAACATGTTCTAATGTACTGTATGTAATTGAAGGTAGGCT
CCAAA 736	
Gierle	ACTACCTCACTGTCGAACATGTCCTTATGTATTGTATGTCATTGAGGGCGGCT
CCAAA 736	
Feline	TTTATCTGACTTTGAGATGCTGTTAATGTATTGCGATGTATGAGAGGTAGGCT
AATGA 743	
Dolphin	ACTATCTCACATTGAAATGGTACTTATGTACTGCGATGTAGTGGAAAGGAAGGTT
AATGA 721	
Saiga_antelope,	TCTACTTAACATTGAGCTGGCCTTATGTACTGTATGTCATAGAGGGTAGACT
TATGA 721	
Goitered_gazelle,	TCTACTTAACATTGAGCTGGCCTTATGTATTGTATGTCATAGAGGGTAGACT
TATGA 721	
Domestic_sheep,	TCTACTTAACATTGAGCTGGCCTTATGTATTGTATGTCATAGAGGGCAGACT
TATGA 721	
Wild_goat,	TCTACTTAACATTGAGCTGGCCTTATGTATTGTATGTCATAGAGGGCAGACT
TATGA 721	
Bharal,	TCTACTTAACATTGAGCTGGCCTTATGTATTGTATGTCATAGAGGGCAGACT
TATGA 721	
Domestic_goat,	TCTACTTAACATTGAGCTGGCCTTATGTATTGTATGTCATAGAGGGCAGACT
TATGA 721	
Measles	ATTACCTGACGTTGAACTGGTTGATGTATTGTATGTCATAGAGGGGAGGTT
AATGA 743	
Rinderpest	ATTACCTGACATTGAGCTGGTGTGATGTACTGTATGTCATAGAGGGTAGGTT
GATGA 721	
Phocine_distemper_north_sea	ATTATTTGACTTTGAAATGGTCTTGTATGTACTGTATGATTGAGGAAAGATT
AATGA 743	
Phocine_distemper_caspian_sea,	ATTACCTAACATTGAAATGGTCTGATGTACTGTATGTAATAGAAGGGAGGCT
AATGA 721	
Dog_canine_distemper	ATTACCTAACATTGAAATGGTCTGATGTACTGTATGTAATAGAAGGGAGGCT
AATGA 721	
Ferret,	ATTACCTAACATTGAAATGGTCTGATGTACTGTATGTAATAGAAGGGAGGCT
AATGA 721	
Porcine	ACTACTAACATTGAAATGGTCTGATGTACTGTATGTCATCGAAGGCCGATT
AATGA 721	
Phyllostomus	ATTACTTGACGTTCGAGATGGCCTAATGTACTGTATGACGTCATTGAAGGAAGACT
AATGA 721	

* * * * * * * * * * * * * * * *

Hendra	TCGAGACTTCGATAAAATCTGATATCAAATACCAATCTTAATTACCAAGATCCAA
CGCTT 955	

Nipah	TGGAGACAAACAGTCAAATCGGATATCAAGTACCAACCTCTAATCTCGAGATCCAA
TGCCC 955	
Niniventer	CAGATACTGCTATGCAACTTGACCCGAAATACCATAAACTTAAACCAAGAGTGCA
TTTAT 796	
Berylmys	CTGAGTCATTAATGAGACTTGATTGTAAGTACAGCATTCTCACAGTAGAGTCAG
TTTAC 796	
Gierle	CCGATACAGCAATGAGACTTGATCTTAAATACGCCTCATTTCATGAGCGTGTCAA
ACTAT 796	
Feline	CTGAAACAGCTATGAGCTTGGACTGTCGGTTACCAATCTATTGCCAAGAGTGCA
ATATA 803	
Dolphin	CGGAAACTGCAATGACTGTGGACCCTAGGTACACTGAGCTCTGTAGAGTAAA
GTACC 781	
Saiga_antelope,	CGGAGACAGCCATGGCCATAGACCAGAGATTCAAGACTTCTAAGCCGGTCAG
ATACT 781	
Goitered_gazelle,	CGGAGACAGCCATGGCCATAGACCAGAGATTCAAGACTTCTAAGCCGGTCAG
ATACT 781	
Domestic_sheep,	CTGAGACAGCCATGGCCATAGATCAGAGATTCAAGACTTCTAAGCCGAGTCAG
ATACT 781	
Wild_goat,	CGGAGACAGCCATGGCCATAGACCAGAGATTCAAGACTTCTAAGCCGAGTCAG
ATACT 781	
Bharal,	CGGAGACAGCCATGGCCATAGACCAGAGATTCAAGACTTCTAAGCCGGTTAG
ATACT 781	
Domestic_goat,	CGGAGACGGCCATGGCCATAGACCAGAGATTCAAGACTTCTAAGCCGGTCAG
ATACT 781	
Measles	CAGAGACCGCTATGACCATTGATGCTAGGTATGCAGAACTTCTAGGAAGAGTCAG
ATACA 803	
Rinderpest	CTGAGACTGCTATGGCATAGATCCCAGGTACACAGAGCTGGAGAGAGTCAG
GTATA 781	
Phocine_distemper_north_sea	CTGATACAGCTATGCCAATTGACCCCGGTTACTCAGCTTGCATGTCAGAATTAA
GTATC 803	
Phocine_distemper_caspian_sea,	CTGATACTGCTATGCCAATTGATCAACGTTACTCAACTTGCATGTCAGGATCAG
GTATC 781	
Dog_canine_distemper	CTGATACTGCTATGCCAATTGATCAACGTTACTCAACTTGCATGTCAGGATCAG
GTATC 781	
Ferret,	CTGATACTGCTATGCCAATTGATCAACGTTACTCAACTTGCATGTCAGGATCAG
GTATC 781	
Porcine	CTGACACAGCCATGTTGATTCAAGAAAATTGCTCAGCTACGTAAGGGTCCA
CTATC 781	
Phyllostomus	CAGACACTGCAATGAGTTGGATCTCAAGTTGCCAATTGTACAAGAGGGTTCA
CTATC 781	

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Hendra
AGTAT 1015
Nipah
AGTGT 1015
Niniventer
AGTGG 856
Berylmys
AGTTG 856
Gierle
AGTTG 856
Feline
TATTG 863
Dolphin
CGTGG 841
Saiga_antelope,
TGTTG 841
Goitered_gazelle,
TGTTG 841
Domestic_sheep,
TGTTG 841
Wild_goat,
TGTTG 841
Bharal,
TGTTG 841
Domestic_goat,

TGTGGACATTCACTTGGTCACTCTTCCCAGATTATGGGTAATAGGATATACAATAT
TCTGGGGCTAATTGATCCCTGTTCCCTGTCATGGGAAACAGAATTACAATAT
TATGGGAGTTGATTGACGGCCTTTCTTGTAGTTAGGTAACAAGACCTATAATAT
TGTGGGAGTTAATTGACGGATTATTGAAGACCTTGGCAATACAACATATGATAT
TGTGGGATCTCATAGATAGGTTATTGAGGACCTTGGGAATAAACCTATGACGT
TGTGGGATTTACTAGATGGAATGTTGAAAGTTAGGCAATCAATTATATTCAAGT
TATGGAATTGATAGACGGCTTCTTCCCCACCTAGGCAACTCCACATATCAAAT
TGTGGGATCTTATTGATGGGTCTTCCAACACTAGGCAACACCACATACCAAAT
TGTGGGATCTTATTGATGGGTCTTCCAACACTAGGCAACACCACATACCAAAT
TGTGGGATCTTATTGATGGGTCTTCCAACACTAGGCAACACCACATACCAAAGT
TGTGGGATCTTATTGATGGGTCTTCCAACACTAGGCAACACCACATACCAAAT
TGTGGGATCTTATTGATGGGTCTTCCAACACTAGGCAACACCACATACCAAAT

TGTTG	841	TGTGGAAACTGATAGATGGTTCTTCCCTGCACTCGGAATCCAACTTATCAAAT
Measles		
TGTAG	863	TGTGGAAACTCATTGATGGGTTTCCAACTCTGGAAATTCTACTTACCAAGT
Rinderpest		
TGTGG	841	TCTGGGACTTGATTGACGGTTCTTCCGGACTTAGGTAATTCAACTTATCAACT
Phocine_distemper_north_sea		
GGTTG	863	TCTGGGATCTAATTGACGGATTTCCGGATCTGGAAATTCAACCTATCAATT
Phocine_distemper_caspian_sea,		
GGTGG	841	TCTGGGATCTAATTGACGGATTCTCCGGATCTGGAAATTCAACCTATCAATT
Dog_canine_distemper		
GGTGG	841	TCTGGGATCTAATTGACGGATTTCCGGATCTGGAAATTCAACCTATCAATT
Ferret,		
GGTGG	841	TCTGGGATCTGATTGACGGATTTTCCTGACTTAGGAACTCTACCTACCAGCT
Porcine		
CGTAG	841	TCTGGGACTTGATTGATGGATTCTTCCCTGATCTGGGAATGCAAACCTACCAAGCT
Phyllostomus		
TGTAG	841	

* * * * * * * * * *

Hendra		CTATGATAGAGCCTTAGTCTGGACTTTACAGTTGAAAGATGAGGCGCGCAT
CCTAA	1075	CTATGATAGAGCCTTAGTTCTGCACTACTCAAACCTAAGGATGAGGCTAGGAT
Nipah		CATTATTAGAACCCCTGGCTTAGCCCACCTCCAGCTCTCGATAGTTGTACTTC
CCTGA	1075	CACTACTAGAACCTCTAGCCCTTGACACCTACAACCTGTTAGATGAGTGTACTTC
Niniventer		CTCTTCTCGAACCTCTGGCTCTGCACATCTCCAGCTTAGGGATGTTGTGTTTC
TATCA	916	CATTATTAGAGCCTCTTCTCTGCTTATTGCAATTGATAGATGCAGATCCACA
Berylmys		CATTATTAGAGCCATTGTCTCTGGCTATCTCCAGTTGAAAGATATCACACTTGA
TATCA	916	CTCTGCTGAACCATTATCGTTGGCTTATCTCAACTTCAGGATGTCACTCTGGA
Gierle		CTCTGCTGAACCATTATCGTTGGCTTACCTCAACTTCAGGATGTCACTCTGGA
TATTC	916	CTCTGCTGAACCATTATCGTTGGCTTACCTCAACTACAGGATGTCACTCTGGA
Feline		CTCTGCTGAACCATTATCGTTGGCTTACCTCAACTTCAGGATGTCACTCTGGA
GATTC	923	CTCTGCTGAACCATTATCGTTGGCTTACCTCAACTACAGGATGTCACTCTGGA
Dolphin		CCATGCTGGAGCCACTTCACTTGCTTACCTGCAACTGAGGATATAACAGTAGA
ATTGA	901	CTCTGTTAGAGCCGCTTCACTTGCTTACCTCCAACGTGAGAGATGTAACAACAGA
Saiga_antelope,		CTCTATTAGAACCTCTTCTTGGCTTATTACAACATAACGTTTTT
GTAA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Goitered_gazelle,		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
GTAA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Domestic_sheep,		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
GTAA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Wild_goat,		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
GTAA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Bharal,		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
GTAA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Domestic_goat,		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
GTAA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Measles		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
ACTCA	923	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Rinderpest		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
ATTAA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Phocine_distemper_north_sea		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
CCTCA	923	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Phocine_distemper_caspian_sea,		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
TCTCA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Dog_canine_distemper		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
TCTCA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Ferret,		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
TCTCA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Porcine		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
GCTCA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
Phyllostomus		CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC
ATTGA	901	CTCTACTGGAGCCTCTCATTGGCTTACTTGCAGTTAAAAGACATCACCTCTC

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Hendra		GAGGGGCATTCTACATCATTGCATTAAAGAGATCCACCAAGAGTTGATTGGATG
TGGGT	1135	GGGGTGCATTCTGCATCAAGAATTGAGTGAGTG
Nipah		

TGGTT	1135	GAGGTGCTTTCTCAACCACTGTTGAGGAACCTGACGAAGTCCTCTTCCGA
Niniventer		GGGGTTGTTCTGAAACAATGCTATCAGACTTAGATCAACTATTAAAGAA
GGGAT	976	GGGGAGCTTCTGCGGCAGTGCTTAGGAGAGCTGAAATCACTTACTAGAAA
Berylmys		GGGGAACATTCTGCATCACTGCTTCCGAGTTAGAAGAAATTATTTGACAA
TGGAT	976	GGGGCGCATTCTTAGTCAGTCTTAAATGAAATCCATGACATTTGGAGAGTAG
Gierle		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAACATIG
TGGGT	976	GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAACATTG
Feline		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
AACCC	983	GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
Dolphin		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
TGGAG	961	GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
Saiga_antelope,		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
CGGCA	961	GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
Goitered_gazelle,		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
CGGCA	961	GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
Domestic_sheep,		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
CGGCA	961	GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
Wild_goat,		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
CGGCA	961	GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
Bharal,		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
CGGCA	961	GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
Domestic_goat,		GAGGTGCTTTTAGACCATTGCTCAAAGAACTCTATGAGATACTGGAGCATTG
CGGCA	961	GAGGTGCTTCCCTAACCACTGCTTACTGAAATACATGATGTTGACCAAAA
Measles		GAGGTGCATTCTAAATCATTGCTTCACTGAGATCCGTGAAATTCTAACAGAA
CGGGT	983	AAGGTGCTTCTTAAGTCATTGCTTACAGAGATAACAGGAATTGCAGGCCAG
Rinderpest		GGGGTGCTTTCTGAGTCAGTCTGCTGAAATTCAAGGAGATTTCAGGACAA
CGGAG	961	GGGGTGCTTTCTGAGTCAGTCTGCTGAAATTCAAGGAGATTTCAGGACAA
Phocine_distemper_north_sea		GGGGTGCTTTCTGAGTCAGTCTGCTGAAATTCAAGGAGATTTCAGGACAA
TGGGT	983	GGGGTGCTTTCTGAGTCAGTCTGCTGAAATTCAAGGAGATTTCAGGACAA
Phocine_distemper_caspian_sea,		AAGGCGCTTCTGTCTATTGCTTACAGAGATAACAGGAATTTCAGGACAA
TGGCT	961	AAGGTGCATTCTTCGATTGTTGCTGAGATCAAAGAAATCCTAGATCAACA
Dog_canine_distemper		*****
TGGCT	961	*****
Ferret,		*****
TGGCT	961	*****
Porcine		*****
AGGTT	961	*****
Phyllostomus		*****
AGGAT	961	*****

Hendra		TTACTGATCAAAAACAAGATCTATCTTATCGATGATCTCTATCAGTAATGAA
TATTG	1195	TTACAGATCAGAAGATTCGGTCTATGTTATTGATGATCTTTATCCATTCTAAA
Nipah		ATGATGATCCTGATGACATCAAGGTACTACATGATCAAATCTATGAAATATTAA
TATCG	1195	ATAGAAATGAATCAGATATAACAAATTACACCTGATGATCTATAACATATTGA
Niniventer		ATACAAATGAGGGGACATTCACTGCTGTTAAATCATCTATAAAATCTCGA
TCCTG	1036	CTTTGATCCTTGTATGAAATTAAATTGAGGCTTGATTACATTATT
Berylmys		TTTTAACTGAGGAGACATATTCTGATGTTGCAATGCATTGGATTACATCTCAT
GCCGT	1036	TTGACACAGCAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Gierle		TTGACACAGCAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
ACCTT	1036	TTGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Feline		TTGGCACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
GACAG	1043	TTGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Dolphin		TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
TACTG	1021	TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Saiga_antelope,		TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
CACCC	1021	TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Goitered_gazelle,		TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
CACCC	1021	TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Domestic_sheep,		TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
CACCC	1021	TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Wild_goat,		TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
CACCC	1021	TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Bharal,		TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
CACCC	1021	TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
Domestic_goat,		TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT
CACCC	1021	TCGACACAGAAGGCACCTACAATTCCATCACTGAAGGATTGGATTACGTATT

Measles	TTTCTGATGAAGGTACTTATCATGAGTTAATTGAAGCCCTAGATTACATTTCAT
AACTG 1043	
Rinderpest	TCACAGATGACAACACATACCACGAGATCGTCGAGGCCCTAGATTATATTTCAT
AACTG 1021	
Phocine_distemper_north_sea	TCTACACCGATGAGACATTCCAAACACTGACTCAGGCTTAGATTCATTTCAT
AACAG 1043	
Phocine_distemper_caspian_sea,	TCTATACTGAAGAGACGTTCCAAACTTTAACCCAAGCTCTAGACTTCGTTTCAT
CACAG 1021	
Dog_canine_distemper	TCTATACTGAAGAGACGTTCCAAACTTTAACCCAAGCTCTAGACTTCGTTTCAT
CACAG 1021	
Ferret,	TCTATACTGAAGAGACGTTCCAAACTTTAACCCAAGCTCTAGACTTCGTTTCAT
CACAG 1021	
Porcine	TTACTTGCAGACACATATGCTCAATTAAATCGAGGCTTAGATACTATCTTTAT
CACTG 1021	
Phyllostomus	TTACCTCGCAGGAGACGTACACCAGCCTAATTGATGCACTTGACACTATCTTCAT
CACTG 1021	

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Hendra		ATAATATCCATCTGTTAGCTGAGTTCTTCTTCCGAACCTTGGTCATCC
AATTC	1255	
Nipah		ATAATATACATCTGTTGGCAGAGTTCTTCTTCTTGTACGTTGGCCATCC
TATTC	1255	
Niniventer		ATGATATCCATCTAACCTGCAGAGCTGTTCTTCTTCCGAGGGTTGGTCATCC
AACGC	1096	
Berylmys		CAGATATTACCTGACTGCAGAAATCTTCTCTTTTAAAGCTTCGGACATCC
AACTT	1096	
Gierle		CAAATCTACATCATACAGCTGAACCTTCTCTTCCGAAGTTTCGGCCACCC
TACCC	1096	
Feline		GTGATATTACATCTAACCTGCAGAAGTTTTCTTTTAAAGCTTGGTCATCC
TTTTT	1103	
Dolphin		ACGACATCCACCTGACAGGGGAGATTTTCAATTCTTCCGAAGTTTCGGTCACCC
GCGTC	1081	
Saiga_antelope,		ACGATATACATCTAACCTGGGGAGATTTTCATTCCGGAGTTTCGGACACCC
CCGTC	1081	
Goitered_gazelle,		ACGATATACATCTAACCTGGGGAGATTTTCATTCCGGAGTTTCGGACACCC
CCGTC	1081	
Domestic_sheep,		ACGATATACATCTAACCTGGGGAGATTTTCATTCCGGAGTTTCGGACACCC
CCGTC	1081	
Wild_goat,		ACGATATACATCTAACCTGGGGAGATTTTCATTCCGGAGTTTCGGACACCC
CCGTC	1081	
Bharal,		ACGATATACATCTAACCTGGGGAGATTTTCATTCCGGAGTTTCGGACACCC
CCGTC	1081	
Domestic_goat,		ACGATATACATCTAACCTGGGGAGATTTTCATTCCGGAGTTTCGGACACCC
CCGTC	1081	
Measles		ATGACATACATCTGACAGGGGAGATTTCTCATTTTCAAAGTTTCGGCCACCC
CAGAC	1103	
Rinderpest		ATGACATTACCTCACGGGTGAAATCTTCTATTCTTAAAGCTTCGGCCACCC
CAGGC	1081	
Phocine_distemper_north_sea		AGGATATACACATAACAGGAGAGATTTCTCCTTTAAAGCTTGGCCATCC
TAGAC	1103	
Phocine_distemper_caspian_sea,		AGGATATACATATAACAGGAGAAATCTTCCTCTTAAAGCTTCGGTCACCC
AAGGT	1081	
Dog_canine_distemper		AGGATATACATATAACAGGAGAAATCTTCCTCTTAAAGCTTCGGTCACCC
AAGGT	1081	
Ferret,		AGGATATACATATAACAGGAGAAATCTTCCTCTTAAAGCTTCGGTCACCC
AAGGT	1081	
Porcine		ATGATATCCATCTGACAGGTGAGATTTCTTTAAAGCTTGGCCATCC
TCGGT	1081	
Phyllostomus		ACGATGTCCACTTGACTGGAGAGATTTCTTAAAGCTTGGAGTTTGGCCATCC
ACGTC	1081	

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Hendra	TCGAAGCCAAAACCGCAGCAGACAAAGTTAGAGAGCATATGCTAGCAGATAAGGT
CCTTG	1315
Nipah	TTGAGGCTAAAGTTGCTGCAGAAAAAGTGAGAGAACATATGTTGGCAGATAAAAGT
TCTTG	1315

Niniventer		TTGAGGCTGTGACGGCTGCTGATAAGGTGAGAGTACATATGCATTCTCCTAAAGT
CCTTA	1156	TGGAAGCAATTACAGCAGCAGAAAAGGTAGAGCTATATGTCAGCTAAAGCCTAAAGT
Berylmys		TTGAAGCTGTCAATGCTGCAACTAAGGTTAGAGACCATATGTCAGCTAAAGCCTAAAGT
GATTG	1156	TAGAGGCACAAAATGCTGCTAATAATGTAAGGAAGTATATGAATAAGCCTAAAGGT
Gierle		TTGAAGCTGTAAACAGCAGCCAACAATGTGAGAAAAGTATATGAACCAACCAAAGT
CATCG	1156	TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
Feline		TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
AATAT	1163	TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
Dolphin		TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
TATCA	1141	TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
Saiga_antelope,		TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
AATCA	1141	TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
Goitered_gazelle,		TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
AATCA	1141	TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
Domestic_sheep,		TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
AATCA	1141	TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
Wild_goat,		TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
AATCA	1141	TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
Bharal,		TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
AATCA	1141	TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
Domestic_goat,		TAGAAGCAGTCACCGCTGCGGAAAATGTCAGAAAACATATGAACCAACCGAAGGT
GATCA	1141	TTGAAGCAGTAACGGCTGCTGAAAATGTCAGGAAATACATGAATCAGCCTAAAGT
Measles		TTGAGGCAATCACAGCCGCAGACAATGTAAGGAAACATATGAACCAACCGAAGGT
CATTG	1163	TAGAAGCAGTAACTGCAGCAGAAAATGTCAGGAAAGCACATGAACCAACGCCAAAGT
Rinderpest		TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
AATAG	1141	TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
Phocine_distemper_north_sea		TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
AGTTT	1163	TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
Phocine_distemper_caspian_sea,		TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
TGTCT	1141	TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
Dog_canine_distemper		TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
TGTCT	1141	TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
Ferret,		TAGAAGCAATAACAGCAGCAGAAAACGTACGGAAACACATGAATCAACCCAAAGT
TGTCT	1141	TAGAGGCAGTGACTGCAGCAGAGAATGTCAGGAAAGCACATGAATCAGCCAAAGT
Porcine		TAGAAGCCATCACTGCTGCTGAAAATGTCAGGAAAGCACATGAATCAACCCAAAGT
CATCT	1141	TAGAAGCCATCACTGCTGCTGAAAATGTCAGGAAAGCACATGAATCAACCCAAAGT
Phyllostomus		TAGAAGCCATCACTGCTGCTGAAAATGTCAGGAAAGCACATGAATCAACCCAAAGT
AGTTT	1141	TAGAAGCCATCACTGCTGCTGAAAATGTCAGGAAAGCACATGAATCAACCCAAAGT

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Hendra		AATACGGGCCAATCATGAAAGCACACGCAGTCTTGTGGTACAATTATAATGG
GTACC	1375	
Nipah		AATATGCCCTATAATGAAAGCACATGCTATATTCTGCGGGACTATAATAATGG
GTATA	1375	
Niniventer		GTTATGAAGTTCTGATGAAAGTCATGCCATATTTGTGGGATTATCATCAATGG
CTATA	1216	
Berylmys		ATTACCAAGATTCTTATGAAAGGGCATGCAATTCTGTGGGATTATAATAATGG
ACACA	1216	
Gierle		ATTATCAAACATTGATGAAAGGCCATGCAGTCTCTGGAATCATCATTAAATGG
ATATC	1216	
Feline		CATATCAGACTTTAATGCAAGGACATGCGATTTCGCGGTATTATAATAATGG
ATTTA	1223	
Dolphin		ACTACGAGACTATGATGAAAGGGCATGCTATATTTGTGGTATTATCATTAAATGG
GTACC	1201	
Saiga_antelope,		GTTATGAGACTATGATGAAAGGCCATCGGGTATTTGCGGGATAATCATAATGG
TTTCC	1201	
Goitered_gazelle,		GTTATGAGACTATGATGAAAGGCCATCGGGTATTTGCGGGATAATCATAATGG
TTTCC	1201	
Domestic_sheep,		GTTATGAGACTATGAAAGGGCACGCAGTATTTGCGGGATAATCATAATGG
TTTTA	1201	
Wild_goat,		GTTATGAGACTATGATGAAAGGGCATGCAGTATTTGCGGGATAATCATAATGG
TTTTA	1201	
Bharal,		GTTATGAGACTATGAAAGGACATCGGGTATTTGCGGGATAATCATAATGG
TTTTA	1201	
Domestic_goat,		GTTATGAGACTATGAAAGGGCATGCAGTATTTGCGGGATAATCATAATGG
TTTTA	1201	
Measles		TGTATGAGACTCTGATGAAAGGTATGCCATATTTGTGGAATCATAATCACCGG

CTATC 1223	TTTATGAAACCCTGATGAAAGGACATGCCATATTCGCGGGATTATCATCAACGG
Rinderpest	CTTATGAGACAATGATGAAAGGGCATGCCATCTCTGTGGGATTATAATCAATGG
GTATC 1201	CTTATGAGACTATGATGAAGGGACATGCTATATTCTGTGGGATAATCATTAAACGG
Phocine_distemper_north_sea	CTTATGAGACTATGATGAAGGGACACGCTATATTCTGTGGGATAATCATTAAACGG
TTATA 1223	CCTATGAGACTATGATGAAGGGACACGCTATATTCTGTGGGATAATCATTAAACGG
Phocine_distemper_caspian_sea,	CCTATGAGACTATGATGAAGGGACACGCTATATTCTGTGGGATAATCATTAAACGG
TTATC 1201	CCTATGAGACTATGATGAAGGGACACGCTATATTCTGTGGGATAATCATTAAACGG
Dog_canine_distemper	CCTATGAGACTATGATGAAGGGACACGCTATATTCTGTGGGATAATCATTAAACGG
TTATC 1201	CCTATGAGACTATGATGAAGGGACACGCTATATTCTGTGGGATAATCATTAAACGG
Ferret,	CCTATGAGACTATGATGAAGGGACACGCTATATTCTGTGGGATAATCATTAAACGG
TTATC 1201	CCTATGAAACCCTAATGAAAGGTATGCAATTCTGCAGGGATAATCATTAGCGG
Porcine	CTTATGAGACTCTAATGAAAGGTATGCAATTCTGTGGGATAATCATAATCAGCGG
ATTCC 1201	
Phyllostomus	
CTTTC 1201	

Hendra		GTGACAGGCATGGGGAGCTGGCCTCCACTTATCTGCCATGCATCGA
ACACA	1435	GGGATAGACACGGAGGAGCCTGGCCTCCTTTACCTCCCCGCACATGCATCTAA
Nipah		GAGATAGACATGGCGGTATGCCACCATTAGAGCTTCCTTACATGCAAGTGA
ACATA	1435	GGGATAGACATGGTGGATCTGGCCGCATGTACCTACCATCTCATGCAGATGA
Niniventer		GGGACAGGCATGGTGGCATGGCCTCCTGTGCTGCCAGATCATGCAGATGA
GAAAAA	1276	GAGACCGCCACGGGGAAACATGGCCTCCTGTGGAGTTACCAAATCATGCATCTGC
Berylmys		GTGATAGGCACGGAGGTAGTTGCCCTCCGATTCCCTCCGACTCATGCATCTTC
GAAGA	1276	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGCACTGCCAGAACATGCCTCTGC
Gierle		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGCAATTGCCAGAACATGCTTCTGC
ACGTG	1276	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
Feline		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCAGAACATGCTTCTGC
TGTAA	1283	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
Dolphin		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
AATAG	1261	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
Saiga_antelope,		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGCAATTGCCAGAACATGCCTCTGC
TGCGA	1261	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGCAATTGCCAGAACATGCCTCTGC
Goitered_gazelle,		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
TGCGA	1261	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
Domestic_sheep,		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
TGCGA	1261	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
Wild_goat,		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
TGCGA	1261	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
Bharal,		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
TGCGA	1261	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
Domestic_goat,		GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
TGCGA	1261	GGGACCGACATGGCGGCAGCTGGCCCCCTGTTGATTGCCGGAACATGCTTCTGC
Measles		GTGACAGGCACGGAGGCAGTTGCCACCCCTGACCTCCCCCTGCATGCTGCAGA
CACAA	1283	GGGACAGGCATGGAGGGAGCTGGCCACCCATCCACCTCCCTGTCATGCCGCCAC
Rinderpest		GAGACAGACATGGAGGAACCTGCCCTCGATGGATCTCCCTGTTACATGCGTCACC
CTCTA	1261	GGGATAGACATGGGGGAACTGGCCTCCGATGGATCTCCCTGTTACATGCGTCACC
Phocine_distemper_north_sea		GGGATAGACATGGGGGACTTGGCCTCCGATGGATCTCCCTGTTACATGCGTCACC
TTTGA	1283	GGGATAGACATGGGGGACTTGGCCTCCGATGGATCTCCCTGTTACATGCGTCACC
Phocine_distemper_caspian_sea,		GGGATAGACATGGGGGACTTGGCCTCCGATGGATCTCCCTGTTACATGCGTCACC
CATCA	1261	GGGACAGGCATGGAGGGAGTTGCCACCCCTTGATTCTCCCTGAGCATGCTTCACC
Dog_canine_distemper		GGGACAGGCATGGAGGGAGTTGCCACCCCTTGATTCTCCCTGAGCATGCTTCACC
TATCA	1261	GGGACAGGCATGGAGGGAGTTGCCACCCCTTGATTCTCCCTGAGCATGCTTCACC
Ferret,		GGGACAGGCATGGGGGAGCTGGCCTCCGATGGATCTCCCTGTTACATGCGTCACC
TATCA	1261	GGGACAGGCATGGGGGAGCTGGCCTCCGATGGATCTCCCTGTTACATGCGTCACC
Porcine		GGGACAGGCATGGGGGAGCTGGCCTCCGATGGATCTCCCTGTTACATGCGTCACC
AGTAG	1261	GGGACAGGCATGGGGGAGCTGGCCTCCGATGGATCTCCCTGTTACATGCGTCACC
Phyllostomus		GGGACAGGCATGGGGGAGCTGGCCTCCGATGGATCTCCCTTAACCCCTCAGAGCATGCTTCACC
CGTGG	1261	GGGACAGGCATGGGGGAGCTGGCCTCCGATGGATCTCCCTTAACCCCTCAGAGCATGCTTCACC

Hendra	TAATAAGACTCAAGAATTCTGGTGAATCATTAACAGTTGATGATTGTGTTAAGAA
CTGGG	1495
Nipah	TAATCCGTTGAAAAATTCTGGGGATCTTGACCATTGACTGTGTCAAGAA
TTGGG	1495
Niniventer	TAACACAGCTTAGGAACAAACGGGGAGGCTTAAAGTGTGCGATCTGTGTAGAAAA

CTGGA	1336	TAATACATCTTAAAACAATGGGAAGCACTTACTGATGCCTATGTATTGAGCA
Berylmys		
TTGGA	1336	TTCAACATCTCAAGAACAAATGGTGAGGCATTGACAGATGCAATTGTATTGAAAA
Gierle		
CTGGA	1336	TTAGAAATGCCAGTTATCTGGAGAAGGGTTAACATCTGAACAAATGTGCTAACAA
Feline		
CTGGA	1343	TTAGGAATGCCCTGGCTTCAGGTGAGGGATTGACCTACAGTCAATGTATTGATAA
Dolphin		
TTGGA	1321	TCCGGAATGCGCAGGCATCAGGTGAGGGACTGACCCATGACCTGTGTATAGACAA
Saiga_antelope,		
CTGGA	1321	TCCGGAATGCGCAGGCATCAGGTGAGGGACTGACCCATGACCTGTGTATAGACAA
Goitered_gazelle,		
CTGGA	1321	TCCGGAATGCGCAGGCATCAGGTGAGGGACTGACCCATGACCTGTGTATAGACAA
Domestic_sheep,		
TTGGA	1321	TCCGGAATGCGCACAGGCATCAGGTGAGGGACTGACCCATGACCTGTGTATAGACAA
Wild_goat,		
TTGGA	1321	TCCGGAATGCTCACAGGCATCAGGTGAGGGACTGACCCATGACCTGTGTATAGACAA
Bharal,		
CTGGA	1321	TCCGGAATGCGCAGGCATCAGGTGAGGGACTGACCCATGACCTGTGTATAGACAA
Domestic_goat,		
CTGGA	1321	TCCGGAATGCGCAGGCATCAGGTGAGGGACTGACCCATGACCTGTGTATAGACAA
Measles		
CTGGA	1343	TCCGGAATGCTCAAGCTTCAGGTGAAGGGTTAACACATGAGCAGTGCCTTGATAA
Rinderpest		
CTGGA	1321	TAAGGAATGCTCAGGCTCAGGTGAAGGGTTGACGTATGAGCAGTGTGTCGATAA
Phocine_distemper_north_sea		
CTGGA	1343	TCAGAAACGCGTGTGTCAGGGGAGGGATAAACATACAGTCAATGTGTAGAAAA
Phocine_distemper_caspian_sea,		
CTGGA	1321	TCAGAAATGCTCATGCCTCAGGGGAGGGATCACCTATAGTCAATGTATAGAAAA
Dog_canine_distemper		
TTGGA	1321	TCAGAAATGCTCATGCCTCAGGGGAGGGATCACCTATAGTCAATGTATAGAAAA
Ferret,		
TTGGA	1321	TCAGAAATGCTCATGCCTCAGGGGAGGGATCACCTATAGTCAATGTATAGAAAA
Porcine		
TTGGA	1321	TTAAAAAACGCCAGGCTTCAGGTGAAGGGCTAACATACAGCCAGTGTGTTGACAA
Phyllostomus		
TTGGA	1321	TTAGAAATGCTCAGACATCGGGAGAAGGGTTAACATATAGTCAGTGTGTTGACAA

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Hendra		AGTCATTTGGGGATTCAATTGATTGCTTATGGAGTTAAAATTAGACAGTGA
TTTGA	1555	
Nipah		AATCATTCTGTGGGATTCAATTGATTGTTCATGGAGCTGAAATTGGACAGTGA
TCTGA	1555	
Niniventer		AGAGTTTTGTGGTATTCAATTCAAATGCTCATGCCATTCTTGACAGTGA
TCTAT	1396	
Berylmys		CTTCTTTGTCGGATTCACTTAAGTGCTTATGCCATTAGAGTTAGATAGTGA
CCTAA	1396	
Gierle		AAAGCTTGCAGGGTTCACTTAAGTGTTATGCCCTAGAGCTAGATAAGGA
TCTCA	1396	
Feline		GATCCTTTGTGGATTAGATTAAATGTTTATGCCATTGAGCTAGATAGTGA
CCTTA	1403	
Dolphin		GGTCATTTGCTGGGTTAAGTTGGGTGTTCATGCCCTGAGCCTAGATAGTGA
CCTGA	1381	
Saiga_antelope,		AATCCTTGTGGATTCAAATTGGCTGCTTATGCCACTCAGCCTAGATAGTGA
TTTGA	1381	
Goitered_gazelle,		AATCCTTGTGGATTCAAATTGGCTGCTTATGCCACTCAGCCTAGATAGTGA
TTTGA	1381	
Domestic_sheep,		AGTCCTTGTGGATTCAAATTGGCTGCTTATGCCACTCAGCCTAGATAGTGA
TTTGA	1381	
Wild_goat,		AGTCCTTGTGGATTCAAATTGGCTGCTTATGCCACTCAGCCTAGATAGTGA
TTTGA	1381	
Bharal,		AATCCTTGTGGATTCAAATTGGCTGCTTATGCCACTCAGCCTAGATAGTGA
TTTGA	1381	
Domestic_goat,		AATCCTTGTGGATTCAAATTGGCTGCTTATGCCACTCAGCCTAGATAGTGA
TTTGA	1381	
Measles		AATCATTGCTGGAGTGAGATTGGCTGTTTATGCCCTTAGCCTGGACAGTGA
TCTGA	1403	

Rinderpest	AGTCATTTGCCGGTGTAAAGGTTGGCTGTTCATGCCCTGAGTTAGACAGTGA
CCTTA 1381	
Phocine_distemper_north_sea	AATCATTGCAAGGGATTAAATTCAAGATGTTATGCCCTGAGTTGGATAGCGA
TTTAA 1403	
Phocine_distemper_caspian_sea,	AATCCTTGCAGGAATTCAAGTTAAATGCTTATGCCCTTAGCCTAGACAGTGA
TTTGA 1381	
Dog_canine_distemper	AATCCTTCGCAGGAATTCAAGTTAAATGCTTATGCCCTTAGCCTAGACAGTGA
TTTGA 1381	
Ferret,	AATCCTTCGCAGGAATTCAAGTTAAATGCTTATGCCCTTAGCCTAGACAGTGA
TTTGA 1381	
Porcine	AATCATTCGTGGGTATGAGGTTAAGTGTAAATGCCCTGAGCCTGACAGTGA
CCTAA 1381	
Phyllostomus	AGTCCTTCGTCGGGATTAAGTTAAGTGTAAATGCCCTGAGCCTGACAGTGA
TTTGA 1381	

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Hendra		GCATGTATATGAAAGATAAAGCACTATCCCCAATAAAGGAGGAATGGGATAGTGT
CTATC	1615	
Nipah		GTATGTATATGAAAGATAAAGCTTATCTCCAATCAAAGACGAATGGGACAGTGT
ATACC	1615	
Niniventer		CAATGTATCTCAAAGATAAAGCTCTGCTGCTTAAAGAAGGAGTGGGATTCTGT
TTACC	1456	
Berylmys		CGATGTATCTCAAAGACAAAGCTCTAGCTGCTTAAAGAAAGAATGGGATTCTGT
TTACC	1456	
Gierle		CAATGTACCTTAAAGACAAGGCACHTGCAGCTCTTAAGAAAGAGTGGGATTCTGT
CTATC	1456	
Feline		CAATGTACCTTAGAGACAAGGCCTGTCACCTGTCAGAAATGAGTGGGATTCAAGT
TTATG	1463	
Dolphin		CTATGTATCTCAAGGATAAAGCACTAGCAGCACTCAAGAAAGAATGGGATTCCGC
TTACC	1441	
Saiga_antelope,		CCATGTATCTCAAAGACAAGGCATTGGCTGCACTGAAGAATGAGTGGGATTCAAGT
TTACC	1441	
Goitered_gazelle,		CCATGTATCTCAAAGACAAGGCATTGGCTGCACTGAAGAATGAGTGGGATTCAAGT
TTACC	1441	
Domestic_sheep,		CCATGTACCTCAAAGACAAGGCATTGGCTGCACTGAAGAATGAGTGGGATTCAAGT
TTACC	1441	
Wild_goat,		CCATGTACCTCAAAGACAAGGCATTGGCTGCACTGAAGAATGAGTGGGATTCAAGT
TTACC	1441	
Bharal,		CCATGTATCTCAAAGACAAGGCATTGGCTGCACTGAAGAATGAGTGGGATTCAAGT
TTACC	1441	
Domestic_goat,		CTATGTACCTCAAAGACAAGGCATTGGCTGCACTGAAGAATGAGTGGGATTCAAGT
TTACC	1441	
Measles		CAATGTACCTAAAGGACAAGGCACHTGCTGCTCTCCAAAGGAAATGGGATTCAAGT
TTACC	1463	
Rinderpest		CTATGTACTTAAAGGACAAGGCCTAGCAGCTCTCAAAAGGAATGGGACTCCGC
TTATC	1441	
Phocine_distemper_north_sea		CCATGTACCTCAAAGATAAAGCCCTGGCAGCCCTTAAAAAGAGTGGGATTCAAGT
ATACC	1463	
Phocine_distemper_caspian_sea,		CCATGTACCTGAAAGATAAGGCCTTGGCAGCCCTAAGAAAAGAGTGGGACTCAAGT
GTACC	1441	
Dog_canine_distemper		CCATGTACCTGAAAGATAAGGCCTTGGCAGCCCTAAGAAAAGAGTGGGACTCAAGT
GTACC	1441	
Ferret,		CCATGTACCTGAAAGATAAGGCCTTGGCAGCCCTAAGAAAAGAGTGGGACTCAAGT
GTACC	1441	
Porcine		CAATGTATCTAAAAGATAAGGCCTTATCTGCCCTCAGGAAAGAGTGGGACTCTGT
GTATC	1441	
Phyllostomus		CTATGTACTTGAAGATAAGGCACHTCGGCCCTTAAGAAGGAATGGGACTCCGT
CTATC	1441	

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Hendra		CACGTGAAGTACTTAATTACACGCCACCCAGATCTACCGAACCAAGAAGATTGGT
GGATG	1675	
Nipah		CACGTGAAGTGTGAGCTATACCCCACCGAAGTCAACCGAGCCAAGAAGATTGGT
TGACG	1675	
Niniventer		CAAAGAAATACATGAAATATTACCATCACCTGTTCTGTCTAAGAAGATTAGT
TAATG	1516	

Berylmys		AAAGAGATGTCTTAAGATATAAGCCTCTAGAGGAACACATCAAGAAGATTAGT
TTCGG	1516	
Gierle		AGCCTGATGTCATGCCTTATCGACCTCAAGAGGGACAACATCTCGTAGGCTTGT
TAATG	1516	
Feline		CTAAGGAGTATTAAGGTATAATCCAGGATTACCCACAAGTCCAGAAGATTGGT
AAATG	1523	
Dolphin		CAAAGGAATACCTCGTTATAATCCTCCAAGCCGACAGGATCGAGAAGACTGGT
CAATG	1501	
Saiga_antelope,		CGAAAGAATACCTCCGTTATAACCCACCTAGAGGGACAGAGTCAGGCGATTGGT
AGAGG	1501	
Goitered_gazelle,		CGAAAGAATACCTCCGTTATAACCCACCTAGAGGGACAGAGTCAGGCGATTGGT
AGAGG	1501	
Domestic_sheep,		CGAAGGAATACCTCCGTTATAACCCACCTAGAGGGACAGAGTCAGGCGATTGGT
GGAGG	1501	
Wild_goat,		CGAAAGAATACCTCCGTTATAACCCACCTAGAGGGACAGAGTCAGGCGATTGGT
GGAGG	1501	
Bharal,		CGAAAGAATACCTCCGTTATAACCCACCTAGAGGGACAGAGTCAGGCGACTGGT
GGAGG	1501	
Domestic_goat,		CGAAAGAATACCTCCGTTATAACCCACCTAGAGGGACAGAGTCAGGCGACTGGT
GGAGG	1501	
Measles		CGAAAGAGTTCTCGCTTACGATCCTCCAAGGAAACGGGTACGGAGGCTTGT
AGATG	1523	
Rinderpest		CGAAAGAATTCCCTCGCTATAACCCACCTAAGAGTACTAGTTACGGAGGCTAGT
CGATG	1501	
Phocine_distemper_north_sea		CAAAGGAGTTCTCAGGTATAATCCTCTCGCTAACCGAGTCCCGAAGGCTGGT
CAATG	1523	
Phocine_distemper_caspian_sea,		CAAAGAATTCCCTCAGGTACAATCCACCTCGCTCCACTGAGTCTCGGAGACTTGT
TAATG	1501	
Dog_canine_distemper		CAAAGAATTCCCTCAGGTACAATCCGCTCGCTCCACTGAGTCTCGGAGACTTGT
TAATG	1501	
Ferret,		CAAAGAATTCCCTCAGGTACAATCCACCTCGCTCCACTGAGTCTCGGAGACTTGT
TAATG	1501	
Porcine		CGAAAGAATATCTACGGTACAACCCCCCAAGTCCTCGGATCTAGAAGATTAGT
TAATG	1501	
Phyllostomus		CAAAGGAGTACTTAAGGTACAACCCCTCCAGATCAACAAGTTCAAGGCGACTAGT
CAATG	1501	

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Hendra		TATTTGTCAATGATGAGAATTCGATCCTATAATATGTTAGAGTATGTCCTTAC
AGGAG	1735	
Nipah		TTTTGTAAATGATGAAAACTTGATCCATACAACATGCTGGAATATGTCTTATC
CGGTG	1735	
Niniventer		TTTCCTTGATGATCGGGATTTGATCCATATCAGATGATAAAATATGTTATTGA
TGGTG	1576	
Berylmys		TTTCCTGGAGGATTCCCAGTTGATCCATATAACATGATCAATTATGTGCTAAG
TGGTG	1576	
Gierle		TCTTCTTAGATGATGACACATTGACCCTAACACATGATTAGGTATGTCCTGTC
AGGAG	1576	
Feline		TATTCTTAGAAGATGATAAGTTGACCCATATGAAATGATCATGTACGTGATAAA
TGGTG	1583	
Dolphin		TTTTCTTGATGACTCTACATTGATCCTAACATATGATCCTCTACGTGATAAA
TGGCT	1561	
Saiga_antelope,		TATTCCCTGAATGACTCCAGCTTGATCCTATAACATGATAATGTACGTGGTGA
TGGCT	1561	
Goitered_gazelle,		TATTCCCTGAATGACTCCAGCTTGATCCTATAACATGATAATGTACGTGGTGA
TGGCT	1561	
Domestic_sheep,		TGTCCTGAATGACTCCAGCTTGATCCTATAACATGATAATGTACGTGGTGA
TGGCT	1561	
Wild_goat,		TGTCCTGAATGACTCCAGCTTGATCCTATAACATGATAATGTACGTGGTGA
TGGCT	1561	
Bharal,		TGTCCTGAATGACTCCAGCTTGATCCTATAACATGATAATGTACGTGGTGA
TGGCT	1561	
Domestic_goat,		TGTCCTGAATGACTCCAGCTTGATCCTATAACATGATAATGTACGTGGTGA
TGGCT	1561	
Measles		TTTCCTTAATGATTGAGCTTGACCCATATGATATGATAATGTATGTCGTAAG
TGGAG	1583	
Rinderpest		TCTTCCTCAATGATTGACATTGACCCTATAACATGATCATGTATGTGGTGA

CGGTG	1561	TATTCTTGGAGGACGCCGAATTGACCCATAAACATGATCATGTACGTAATTCT
Phocine_distemper_north_sea		
TGGCC	1583	TGTTTCTAGAGGACTCTCAGTTGACCTTATAACATGATTATGTACGTTATCTC
Phocine_distemper_caspian_sea,		
AGGTC	1561	TGTTTCTAGAGGACTCTCAGTTGACCTTATAACATGATTATGTACGTTATCTC
Dog_canine_distemper		
AGGTC	1561	TGTTTCTAGAGGACTCTCAGTTGACCTTATAACATGATTATGTACGTTATCTC
Ferret,		
AGGTC	1561	TGTTTCTAGAGGACTCTCAGTTGACCTTATAACATGATTATGTACGTTATCTC
Porcine		
TGGAG	1561	TTTTCTAGAGGATCCGAATTGACCTTATAATATGATCATGTATGAAATATC
Phyllostomus		
TGGTG	1561	TTTTCTTGAAGATTCTGACTTCGATCCTAACACATGATCATGTACGTTATCTC

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Hendra		ATTATTTAACTGATGAAACAATTCAATGTTCTTATAGCTAAAGGAGAAAGAAC
TAAAC	1795	CTTATCTCGAGGATGAAACAATTCAATGTTCTTATAGCTGAAGGAGAAAGAGAC
Nipah		AGTACTTAAGAGATGAAACAATTAACTTATCATATAGTTGAAAGAGAAAGAAAT
GAAGC	1795	ACTATATGAGGGATCCAGATTAAATTGTCTTATAGCTTAAAGAGAAAGAAAT
Niniventer		AATATCTTAGTGATCCTGACTTCATCTGTATAGCTCAAGGAGAAAGAGAT
TAAAG	1636	ATTACTTAAGAGACAAAGAGTTAACCTTCATACAGCCTAAAGAGAAAGAAAT
Berylmys		CCTATTTGGAAGACCCTGATTCAACTTATCTTACAGCCTAAAAGAAAAAGAGAT
AAAAT	1636	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Gierle		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
TAAGC	1636	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Feline		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
TAAAG	1643	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Dolphin		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
TAAAG	1621	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Saiga_antelope,		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
AAAGG	1621	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Goitered_gazelle,		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
AAAGG	1621	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Domestic_sheep,		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
AAAGG	1621	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Wild_goat,		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
AAAGG	1621	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Bharal,		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
AAAGG	1621	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Domestic_goat,		CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
AAAGG	1621	CCTACCTTAAAGACCCTGAGTTAACCTCTCATACAGCCTAAAAGAGAAAGGAGAT
Measles		CCTACCTCCATGACCCTGAGTTAACCTGTCTTACAGCCTGAAAGAAAAGGAGAT
CAAGG	1643	ATTACCTCCGAGACCCTGACTTCATCTTATAGCCTAAAGGAAAAGGAAAT
Rinderpest		AGTATTTAAAGGACCCTGATTCAATCTCTCATATAGCTTAAAGAAAAGAGAT
TAAAG	1621	AATATCTAGAAGATCCTGATTCAACCTATCATACAGTCTCAAAGAGAAAGAGAT
Phocine_distemper_north_sea		AATATCTAGAAGATCCTGATTCAACCTATCATACAGTCTCAAAGAGAAAGAGAT
TAAGG	1643	AATATCTAGAAGATCCTGATTCAACCTATCATACAGTCTCAAAGAGAAAGAGAT
Phocine_distemper_caspian_sea,		AATATCTAGAAGATCCTGATTCAACCTATCATACAGTCTCAAAGAGAAAGAGAT
TAAAG	1621	AATATCTAGAAGATCCTGATTCAACCTATCATACAGTCTCAAAGAGAAAGAGAT
Dog_canine_distemper		AATATCTAGAAGATCCTGATTCAACCTATCATACAGTCTCAAAGAGAAAGAGAT
TAAAG	1621	AATATCTAGAAGATCCTGATTCAACCTATCATACAGTCTCAAAGAGAAAGAGAT
Ferret,		AATATCTAGAAGATCCTGATTCAACCTATCATACAGTCTCAAAGAGAAAGAGAT
TAAAG	1621	AATACCTGAGAGACCCGGACTTCAACTTGTCTTATAGTCTCAAGGAGAAAGAAAT
Porcine		AGTACCTTCATGATCCAGAGTTCAATTATCATACAGCCTAAAGAAAAGGAAAT
CAAAG	1621	
Phyllostomus		
TAAAG	1621	

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Hendra		AAGCAGGAAGATTATTGCTAAATGACATATAAGATGCGTGCCTGTCAGGTAAT
TGCTG	1855	AAGCTGGACGATTGTCGAAAGATGACCTACAAATGCGTGCATGTCAAGTCAT
Nipah		AGGTGGTAGGTTATTGCAAAGATGACCTATAAAATGAGAGCATGCCAAGTGAT
AGCAG	1855	TAGTTGGAAGGTTATTGCCAAGATGACATACAAATGAGAGCATGCCAAGTAAT
Niniventer		
AGCAG	1696	
Berylmys		

AGCAG	1696	AGGTAGGGAGACTGTCGAAAAATGACATACAAATGAGGGCTTGTCAAGTCAT
Gierle		
TGCGG	1696	AGGTAGGTCGATTGTTGCTAAAATGACCTATAAGATGAGGGCTTGTCAAGTAAT
Feline		
AGCTG	1703	AAGTTGGGAGACTATTGCCAAAATGACCTACCAAATGAGGGCTGCCAAGTCAT
Dolphin		
TGCAG	1681	AGACAGGGCGGTTGTTGCCAAAATGACCTATAAGATGCGGGCCTGTCAGGTAAT
Saiga_antelope,		
CGCTG	1681	AGACAGGGCGGTTGTTGCCAAAATGACCTATAAGATGCGGGCCTGTCAGGTAAT
Goitered_gazelle,		
CGCTG	1681	AGACAGGGCGGTTGTTGCCAAAATGACCTATAAGATGCGGGCCTGTCAGGTAAT
Domestic_sheep,		
CGCTG	1681	AGACAGGGCGGTTGTTGCCAAAATGACCTATAAGATGCGGGCCTGTCAGGTAAT
Wild_goat,		
CGCTG	1681	AGACAGGGCGGTTGTTGCCAAAATGACCTATAAGATGCGGGCCTGTCAGGTAAT
Bharal,		
TGCTG	1681	AGACAGGGCGGTTGTTGCCAAAATGACTTATAAGATGCGGGCCTGTCAGGTAAT
Domestic_goat,		
CGCTG	1681	AGACAGGGCGGTTGTTGCCAAAATGACCTATAAGATGCGGGCCTGTCAGGTAAT
Measles		
CGCTG	1703	AAACAGGTAGACTTTCGCTAAAATGACTTACAAAATGAGGGCATGCCAAGTGTAT
Rinderpest		
AGCCG	1681	AGACTGGGAGACTCTTGCCAAAATGACTTACAAGATGAGAGCATGTCAGGTTAT
Phocine_distemper_north_sea		
CGCAG	1703	AGGTAGGTAGATTGTCGCGAAAATGACATATAAAATGAGAGCATGTCAAGTCAT
Phocine_distemper_caspian_sea,		
AGCAG	1681	AGGTAGGGAGGCTATTGCTAAAATGACCTACAAAATGCGAGGCCTGTCAGGTCAT
Dog_canine_distemper		
AGCAG	1681	AGGTAGGGAGATTATTGCTAAAATGACCTACAAAATGCGAGGCCTGTCAGGTCAT
Ferret,		
AGCAG	1681	AGGTAGGGAGATTATTGCTAAAATGACCTACAAAATGCGAGGCCTGTCAGGTCAT
Porcine		
TGCTG	1681	AAGTCGGGAGGCTATTGCAAAAATGACATACAAGATGAGAGCATGCCAGGTGAT
Phyllostomus		
TGCAG	1681	AAGTAGGTAGGCTTTGCCAAAATGACCTACAAGATGAGAGCATGTCAGGTCAT

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Hendra		AAGCTTGATTGCATCGGAGTGGGCAAGTATTTAAAGAGAACGGATGGTTAA
AGATG	1915	
Nipah		AGGCCCTGATAGCCTCAGGTGTCGGTAAATATTTAAGGAGAACGGATGGTTAA
GGATG	1915	
Winniventer		AGAATTAAATATCTAACGGCGTAGGAAGATTCTTAAGGACAATGGGATGGCAAA
AGATG	1756	
Berylmys		AAAACTTGATTGCTAATGGAGTAGGAAAGTTCTTAAGGATAATGGAATGGTAA
AGATG	1756	
Sierle		AGAATCTGATAGCCAATGGTATCGTAAGTCTTCCGAGATAACGGATGGCTAA
AGATG	1756	
Leeline		AAAACCTGATTGCCAATGGAGTAGGAAAGTTTCAAAGATAATGGAATGGCAAA
AGATG	1763	
Dolphin		AGAATTAAATCAAATGGAATAGGAAAGTATTCAAAGACAACGGTATGCCAA
AGATG	1741	
Saiga_antelope,		AAAATCTGATATCGAATGGTGTGGAAAGTATTCCGAGACAATGGGATGGCAAA
GGACG	1741	
Goitered_gazelle,		AAAATCTGATATCGAATGGTGTGGAAAGTATTCCGAGACAATGGGATGGCAAA
GGACG	1741	
Domestic_sheep,		AAAATCTGATATCGAATGGTGTGGAAAGTATTCCGAGACAATGGGATGGCAAA
GGACG	1741	
Wild_goat,		AAAATCTGATATCGAATGGAGTTGGAAATATTCCGAGACAATGGGATGGCAAA
GGACG	1741	
Bharal,		AAAATCTGATATCGAATGGTGTGGAAAGTATTCCGAGACAATGGGATGGCAAA
GGACG	1741	
Domestic_goat,		AAAATCTGATATCGAATGGAGTTGGAAAGTATTCCGAGACAATGGGATGGCAAA
GGACG	1741	
Measles		AAAATCTAACTCAAACGGGATTGGCAAGTATTTAAGGACAATGGGATGCCAA
GGATG	1763	
Rinderpest		AAAACCTGATTCCAATGGTATCGGAAGTATTAGAGACAATGGGATGGCAAA
AGATG	1741	

Phocine_distemper_north_sea	AAAACCTGATATCAAACGGGATTGGGAAGTACTTCAAAGATAACGGGATGGCAAA
AGATG 1763	
Phocine_distemper_caspian_sea,	AAAACTTGATATCTAATGGAATTGGGAAGTACTTCAAGGACAATGGGATGGCAAA
GGATG 1741	
Dog_canine_distemper	AAAACTTGATATCTAATGGAATTGGGAAGTACTTCAAGGACAATGGGATGGCAAA
GGATG 1741	
Ferret,	AAAACTTGATATCTAATGGAATTGGGAAGTACTTCAAGGACAATGGGATGGCAAA
GGATG 1741	
Porcine	AAAACCTTAATGCCAATGGTATAGGAAAGTATTCAAGGATAACGGCATGGCAAA
AGACG 1741	
Phyllostomus	AGAATCTGATTCCAACGGGATAGGTAAGTATTCAAGGATAACGGAATGGCAAA
AGATG 1741	

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Hendra		AACATGAGCTACTCAAAACTTATTCAACTGTCAATCTCTCAGTACCTCGAGG
CAATA	1975	
Nipah		AGCACGAACCTTGAAAGACACTCTTCCAATTGTCTATTCCCTCAGTCCCTCGAGG
GAACA	1975	
Niniventer		AACATGAATTAACAAAAGCACTCCACACTCTTCATTATCATCAATCCCTAAGGA
TCTTA	1816	
Berylmys		AGCATGATCTCACTAAAGCCCTCCATACTTAGCTATATCATCAATTCCCTAAGGA
TGGCA	1816	
Gierle		AGCATGAGCTGACAAAAGCCTGCACACACTAGCCATTCCAGTCCAAAAGA
CAACA	1816	
Feline		AACATAAATTAACTAAGACGTTACACAAATTAGCCATTCAAGGTGTACCTAAAGA
TAATT	1823	
Dolphin		AACATGATCTACAAAGGCACCCACACTAGCGGTTCAAGGTACCTAAGAA
CAAAA	1801	
Saiga_antelope,		AGCATGACCTAACAAAAGCCCTCACACCCTGGCAGTCTCAGGTGTTCCCAAAAA
CAACA	1801	
Goitered_gazelle,		AGCATGACCTAACAAAAGCCCTCACACCCTGGCAGTCTCAGGTGTTCCCAAAAA
CAACA	1801	
Domestic_sheep,		AGCATGACCTAACAAAAGCCCTCACACTCTGGCAGTCTCAGGTGTTCCCAAGAA
CAACA	1801	
Wild_goat,		AGCATGACCTAACAAAAGCCCTCACACTCTGGCAGTCTCAGGTGTTCCCAAGAA
CAACA	1801	
Bharal,		AGCATGACCTAACAAAAGCCCTCACACCCTGGCAGTCTCAGGTGTTCCCAAGAA
CAACA	1801	
Domestic_goat,		AGCATGACCTAACAAAAGCCCTCACACCCTGGCAGTCTCAGGTGTTCCCAAGAA
CAACA	1801	
Measles		AGCACGATTGACTAAGGCACCTCCACACTCTGGCTGTCAGGAGTCCCAAGAA
TCTCA	1823	
Rinderpest		AGCATGACCTCACTAAAGCTCCATACATGGCAGTCTCAGGAGTCCCAAGGA
TTTTA	1801	
Phocine_distemper_north_sea		AACACGACCTAACTAACAGCCTTACATACTTGGCTGTATCTGGAGTCCCAAGGA
CAAAA	1823	
Phocine_distemper_caspian_sea,		AACACGATCTCACTAAAGCATTGCACACTCTGGCTGTCCGGGGTTCCGAAAGA
CAAGA	1801	
Dog_canine_distemper		AACACGATCTCACTAAATCATTGCACACTCTGGCTGTCCGGGGTTCCGAAAGA
CAAGA	1801	
Ferret,		AACACGATCTCACTAAATCATTGCACACTCTGGCTGTCCGGGGTTCCGAAAGA
CAAGA	1801	
Porcine		AACATGACCTAACAAAAGCATTACATAACCCTGGCTGTCTGGGGTCCCAAGAA
TAAAT	1801	
Phyllostomus		AGCATGACTTAACCAAAGCTTACACACTTTAGCAGTCTCAGGAGTTCCTAAGGA
CAAAT	1801	

GTCAGGGCAGAGATTCCGAATTCCAATAACACAGAGAAAAGTCTCATATCACT
GTCAGGGTAATGATCCTCAATCCATCAATAATATAGAAAGAGATTCCAATACTT
GTCATAATTATAAAGGTGGCGATTCAACATCATAAGCTTAAACATAGGT----
AGTTAACATAAAAATTACACCAATTCCAATACTAGAGTTCAATTAGAAG----

Gierle		AACTTGGTCACAAAACACACCTAGAGTTGAGGATACTCAATCAGCACACA-----
-----	1867	
Feline		CTAAACTTATTTAGATGAATGTTGGGAGCAAGTAATTGACAATGTTCAA-----
-----	1874	
Dolphin		AAGATTACCATAGAGGTGAAGGTGGGAGACAGACCAATCCTGGTGGTTG-----
-----	1852	
Saiga_antelope,		AAGATAACCACCGAGGTGGCCTCCCAGAAGGACAACAAACCGAGGGGTGA-----
-----	1852	
Goitered_gazelle,		AAGATAACCACCGAGGTGGCCTCCCAGAAGGACAACAAACCGAGGGGTGA-----
-----	1852	
Domestic_sheep,		AAGATAACCACCGAGGTGGCCTCCCAGAAGAACAACAAACCGAGAGGTGA-----
-----	1852	
Wild_goat,		AAGACAACCACCGAGGTGGCCTCCCAGAAGAACAACAAACCGAGAGATGA-----
-----	1852	
Bharal,		AAGATAACCACCGAGGTGGCCTCCCAGAAGGACAACAAGCCGAGAGGTGA-----
-----	1852	
Domestic_goat,		AAGATAACCACCGAGGTGGCCTCCCAGAAGGACAACAGGCCGAGAGGTGA-----
-----	1852	
Measles		AAGAAAAGTCACAGGGGGGGGCCAGTCTAAAAACCTACTCCGAAGCCCAG-----
-----	1874	
Rinderpest		AAGATAATTACCGCGGTGGACCCAGGGCCAAGACTTTCTCCTCCAAGAAGA-----
-----	1852	
Phocine_distemper_north_sea		AAGACTCTCATCGTGGTTAATAAACAAACAAAGATCATTCAACTCCGAAC-----
-----	1874	
Phocine_distemper_caspian_sea,		AAGACTTCCATCGTGGCCTCACTAACCAAGAGTAAATCCCTGAAACCTGCAC-----
-----	1852	
Dog_canine_distemper		AAGATTCCCATCGTGGCCTCACTAACCAAGCGTAAATCCCTGAAGCCTGCAC-----
-----	1852	
Ferret,		AAGATTCCCATCGTGGCCTCACTAACCAAGCGTAAATCCCTGAAGCCTGCAC-----
-----	1852	
Porcine		CCCAAAGCACCGAGACCCCAGAACTAAAATAGATAACCACTATAATAGAG-----
-----	1852	
Phyllostomus		CTCAAAACATCGTGACCTAGAGTTCAAAAGGCCACCTGTATGAAACAA-----
-----	1852	

Hendra		GAACAAACAGGTAGGCTTCTGAATAATGAAGTTCTTGTCAATGAACATTATGTC
GGCTT	2095	
Nipah		GGGTCACTACCAATGTGAAAGACAAAAGAATAACTCTTTAATAAGGTTAAATC
TGCTC	2095	
Niniventer		-----CTGGTGCAA-----TAAAG-----AGGAA-----
-----	1886	
Berylmys		-----ATAATC-----
-----	1873	
Gierle		-----ACAATTG-----
-----	1875	
Feline		-----GTAGTACAC-----AGATA-----AGGGA-----
-----	1893	
Dolphin		-----GTGACAA-----G-----
-----	1860	
Saiga_antelope,		-----GATCAAG-----C-----
-----	1860	
Goitered_gazelle,		-----GATCAAG-----C-----
-----	1860	
Domestic_sheep,		-----GATCAAG-----C-----
-----	1860	
Wild_goat,		-----GATCAAG-----C-----
-----	1860	
Bharal,		-----GATCAAG-----C-----
-----	1860	
Domestic_goat,		-----GATCAAG-----C-----
-----	1860	
Measles		-----TCCACAC-----A-----
-----	1882	
Rinderpest		-----CACACAC-----T-----
-----	1860	
Phocine_distemper_north_sea		-----CCAATT-----A-----

-----	1882	
Phocine_distemper_caspian_sea,		-----CTTATCG-----A-----
-----	1860	
Dog_canine_distemper		-----CTTATCG-----A-----
-----	1860	
Ferret,		-----CTTATCG-----A-----
-----	1860	
Porcine		-----AACAGG-----G-----
-----	1860	
Phyllostomus		-----AACAGCA-----A-----
-----	1860	

Hendra		TAATTGACAAAAATCAGTCAGACCAAAAGAAGCATAATATTCTCCAAACACACG
AAATC	2155	TCAATAATCCGTGCCAAGCTGACGGAGTCCATCATACATGTCACCCAATACACG
Nipah		-----AG-AGAAATATTCCCTTC-----GGA-
AAATC	2155	
Niniventer		-----CTTC-----G---
--ACG	1910	
Berlylmys		-----T-CACAATCTCAGCAGTC-----CAA-
--AT	1880	
Gierle		-----A-----CAGACTATGAATTACAATCAAATAGGGA
--TGC	1898	
Feline		-----TCAAAGATTAATAAGCGAC-----
AATTG	1928	
Dolphin		-----CAAGGCACCAAAACACAAG-----
--ATG	1882	
Saiga_antelope,		-----CAAGGCACCAAAACACAAG-----
--ATA	1882	
Goitered_gazelle,		-----CAAGGCACCAAAACACAAG-----
--ATA	1882	
Domestic_sheep,		-----CAAGACACCAAAACACAAA-----
--ATA	1882	
Wild_goat,		-----CAAGACACCAAAACACAAA-----
--ATA	1882	
Bharal,		-----CAAGACACCAAAACACAAA-----
--ATA	1882	
Domestic_goat,		-----CAAGACACCAAAACACAAA-----
--ATA	1882	
Measles		-----AGTACCAAGGAACGTTAAAG-----
--CAG	1904	
Rinderpest		-----GGGGCTGGTATCTCAAGGG-----
--TGT	1882	
Phocine_distemper_north_sea		-----AAGACACTGCACCCCTAGTT-----
--CAC	1904	
Phocine_distemper_caspian_sea,		-----GGAGCACTTCACTCCGTCT-----
--CTT	1882	
Dog_canine_distemper		-----GGAACCCGTCACTCCGTCT-----
--CTT	1882	
Ferret,		-----GGAGCCCTTCACTCCGTCT-----
--CTT	1882	
Porcine		-----GGTCTCCAAAATGTCAAC-----
--TTG	1882	
Phyllostomus		-----AAAGCAGAAAGTGACATCC-----
--ACA	1882	

Hendra		GCCACAAGTGTGATAACACTAGCCAAACATTCTTGACTATCATATGGAATTCA
TCCCT	2215	GTTATAAGTGTAGTAATACAAGTAAGTCTTTCTCGATTATCATAACGAGTTAA
Nipah		AG-TTATCTCT-----CAC-----CACACCCTTGC-
TCCTC	2215	
Niniventer		TA-GCACCATA-----TCT-----TATAAAGGTCA-
-----	1934	
Berlylmys		AA-GTGCCAAG-----TCA-----TACACTCGTCA-
-----	1904	
Gierle		

-----	1922	
Feline		AATCAAAGTCTTCTAGGGCACGTCT-----TAATAATAGAG-
-----	1964	-----
Dolphin		GA-CAAACCTCAA-----
-----	1894	-----
Saiga_antelope,		GA-GACAAGGTTC-----
-----	1894	-----
Goitered_gazelle,		GA-GACAAGGTTC-----
-----	1894	-----
Domestic_sheep,		GA-GACAAGGTCC-----
-----	1894	-----
Wild_goat,		GA-GACAAGGTCC-----
-----	1894	-----
Bharal,		GA-GACAAGGTCC-----
-----	1894	-----
Domestic_goat,		GA-GACAAGGTCC-----
-----	1894	-----
Measles		AA-AAAGGGTTG-----
-----	1916	-----
Rinderpest		CT-AGAAATGAGG-----
-----	1894	-----
Phocine_distemper_north_sea		TT-TCAAACAATC-----
-----	1916	-----
Phocine_distemper_caspian_sea,		CC-CCAAGTAGTA-----
-----	1894	-----
Dog_canine_distemper		CC-CCAAGTAGTA-----
-----	1894	-----
Ferret,		CC-CCAAGTAGTA-----
-----	1894	-----
Porcine		GA-GGAAAACAGG-----
-----	1894	-----
Phyllostomus		AT-CGAAGATTAA-----
-----	1894	-----

Hendra		ACAAGTCAGACAGAATGGATAGGACAGAGACATCTGATTCTCGAAATATGATGA
TGGAA	2275	ACAATCACTATAAATCAGACAATACAGAGGGCGCGTACTGTCCAGGTATGAGGA
Nipah		-----AAACCCAGGGAGTAATCAATATCAGATTAATCTG-CAAACATCTTC
CAACA	2275	-----
Niniventer		-----TAGT-AAAA-----GCAAATTGAGCCAAGACAAATTGATGAACA
TGATG	1984	-----AAAC-CAGAGCCGGATCAGGTCAAGGAAAATCAGTGACATTGATCA
Berylmys		-----
GTCAA	1948	-----ATATCTAAAGGGCAAGAGAGATTGCAACAAACAAGTAAAGTATCC
Gierle		-----
AACAT	1972	-----CGGCTCATTCTAATTATGCTGGTGCCGGGTGCGGAATCAAGAATGG
Feline		-----
TTCAA	2015	-----AAGGGGGACCTATGTACAACACTATTGCGATGCCAACCGATCAGCCC
Dolphin		-----
ACATG	1945	-----AAGGGGGACCTATGTACAACACTATTGCGATGCCAACCAATCAGCCC
Saiga_antelope,		-----
TGATC	1945	-----AAGGGGGCCTGTGTACAACACTATTGCGATGCCAACCAATCAGCCC
Goitered_gazelle,		-----
TGATC	1945	-----AAGGGGGCCTATGTACAACACTATTGCGATGCCAACCAATCAGCCC
Domestic_sheep,		-----
TGATC	1945	-----AAGGGGGCCTATGTACAACACTATTGCGATGCCAACCAATCAGCCC
Wild_goat,		-----
TGATC	1945	-----AAGGGGGCCTATGTACAACACTATTGCGATGCCAACCAATCAGCCC
Bharal,		-----
TGATC	1945	-----AAGGGGGCCTATGTACAACACTATTGCGATGCCAACCAATCAGCCC
Domestic_goat,		-----
TGATC	1945	-----TAGGATTCCCTCATGTAATTGGCAGAATCAAGACACTGATCATCC
Measles		-----
GGAGA	1967	-----CAAACCTACCGGTACCCGAACAAACGAGGCTGCAACACCGGTGGCCC
Rinderpest		-----
CGATC	1945	-----ATCGTAAGAGTCAGATAACCAACTTCTGTACCACTAGGCAGGAAGA
Phocine_distemper_north_sea		-----CAATG 1967

Phocine_distemper_caspian_sea, CAATG 1945	-----GATATATAGACCCAAACCAAATTTGCACCAGTAGAAGAGAAGA
Dog_canine_distemper CAATG 1945	-----GATATATAGACCCAAACCAAATTTGCACCAGTAGAAGAGAAGA
Ferret, CAATG 1945	-----GATATATAGACCCAAACCAAATTTGCACCAGTAGAAGAGAAGA
Porcine TAATG 1945	-----GCCCATCAGGACATCGGACGGGTTCATCAGTGGCCGGCTGATGA
Phyllostomus CAATG 1945	-----AGAGTAACAAAGTTAAAAAGAATTCTTGCAGAAGAAGCGAGGA

Hendra		CAGGAACAAAATTGACACGGTGAGTGCTTCCTAACTACTGACTTGAAGAAATT
CTGTC	2335	CTGGGACAAAATTGATACAGTAAGTGCATTCTTACAACAGATCTAAAAAGTA
Nipah		GTAATGATACATATGAGACTTTAACAGCGCGTTCATCACAAACAGATCTAAAAAGTA
CTGTC	2335	CGGGAGTCAATTATGAAACAGTTAGTGCTTTATAACGGCAGACTTACAGAAATA
Niniventer		CATCTAAAATTATGAAACAGTGAGTGCTTCATTACTGCAGACCTGCAAAAGTA
TTGTC	2044	ACACCGAGTATTATGAGACTATCAGTAGTTCATAACTACTGACCTTAAAAAGTA
Berylmys		ATCAGGAGGCTTACGAGACTGTCAGTGCTTTATCAGACTGATCTTAAGAAATA
TTGCC	2008	AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Gierle		AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
CTGCT	2032	AGGGCGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Feline		AAGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
TTGTC	2075	AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Dolphin		AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
CTGTT	2005	AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Saiga_antelope,		AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
TTGCC	2005	AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Goitered_gazelle,		AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
TTGCC	2005	AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Domestic_sheep,		AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
TTGCC	2005	AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Wild_goat,		AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
TTGCC	2005	AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Bharal,		AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
TTGCC	2005	AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
Domestic_goat,		AGGGTGAGTCATACGAGACTGTTAGTGCATTCAACCGCTGACCTTAAGAAGTA
TTGCC	2005	ATATAGAAACCTACGAGACAGTCAGCGATTATCACGACTGATCTCAAGAAGTA
Measles		AGATAGAGAGTTATGAAACAGTTAGTGCTTTATCACAGCTGATCTGAAAAAGTA
CTGCC	2027	ACACGGAGATTTACGAGACTGTAAGTGCCTTATAACCACAGATCTAAAAAGTA
Rinderpest		ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACGGATCTAAAAAGTA
TTGCC	2005	ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACAGATCTAAAAAGTA
Phocine_distemper_north_sea		ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACAGATCTAAAAAGTA
CTGCC	2027	ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACAGATCTAAAAAGTA
Phocine_distemper_caspian_sea,		ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACAGATCTAAAAAGTA
CTGTC	2005	ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACAGATCTAAAAAGTA
Dog_canine_distemper		ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACAGATCTAAAAAGTA
CTGTC	2005	ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACAGATCTAAAAAGTA
Ferret,		ACATAGAGATCTATGAAACTGTAAGTGCATTATAACTACAGATCTAAAAAGTA
CTGTC	2005	ACATAGACCTTATGAGACTGTAAGTGCCTTATAACCAACTGATCTAAAAAGTA
Porcine		ACCCAGATTGCATGAAACAGTGAGTGCTTGTCAACCGATCTCAAGAAGTA
TTGTT	2005	ACCCAGATTGCATGAAACAGTGAGTGCTTGTCAACCGATCTCAAGAAGTA
Phyllostomus		ACCCAGATTGCATGAAACAGTGAGTGCTTGTCAACCGATCTCAAGAAGTA
TTGTC	2005	ACCCAGATTGCATGAAACAGTGAGTGCTTGTCAACCGATCTCAAGAAGTA

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Hendra		TCAATTGGCGATATGAATCCATGGCTATTTGCAGAAAGACTTGACGAAATTTA
TGGCT	2395	
Nipah		TCAATTGGAGATACGAATCAATGGCTATTTGCTAACGTCTGGATGAGATATA
CGGTT	2395	
Niniventer		TTAATTGGAGGTATGAATCAATTAGTGTTCGCAGAAAGATTAAATGAGATTAA
TGGCC	2104	
Berylmys		TGAACTGGAGATATGAAACAAACATCAGTGTTCGCAGAACGCCTGAATGAAATATA
TGGGT	2068	
Gierle		TGAACTGGAGGTATGAGACAATTCCATTTGCAGAACGCTTGAATGAGATTAA
TGGAC	2092	

Feline		TTAACTGGCGATATGAATCAAGTAGTATGTTGCAGAGAGACTTAATGAAATTAA
TGGAC	2135	
Dolphin		TAAATTGGAGGTATGAGACAATCAGCATATTGCCAGAGACTAAATGAGATTAA
TGGGT	2065	
Saiga_antelope,		TGAATTGGAGATACGAGACAATCAGCATATTGCACAGAGGCTGAATGAAATATA
TGGAC	2065	
Goitered_gazelle,		TGAATTGGAGATACGAGACAATCAGCATATTGCACAGAGGCTGAATGAAATATA
TGGAC	2065	
Domestic_sheep,		TGAATTGGAGATACGAGACAATCAGCATATTGCACAGAGGCTGAATGAAATATA
TGGAC	2065	
Wild_goat,		TGAATTGGAGATACGAGACAATCAGCATATTGCACAGAGGCTGAATGAAATATA
TGGAC	2065	
Bharal,		TGAATTGGAGATACGAGACAATCAGCATATTGCACAGAGGCTGAATGAAATATA
TGGAC	2065	
Domestic_goat,		TGAATTGGAGATACGAGACAATCAGCATATTGCACAGAGGCTGAATGAAATATA
TGGAC	2065	
Measles		TTAATTGGAGATATGAGACCATCAGCTTATTGCACAGAGGCTAAATGAGATTAA
CGGAT	2087	
Rinderpest		TGAACCTGGAGGTATGAGACAATCAGCTTATTGCTAAAGGCTAAATGAGATATA
CGGGT	2065	
Phocine_distemper_north_sea		TGAATTGGAGATACGAGACAATCAGCATATTGCTAAAGGTTAAATGAAATCTA
TGGGC	2087	
Phocine_distemper_caspian_sea,		TGAATTGGCGTTATGAGACCATCAGTATTTGCTCAGAGATTAAATGAAATCTA
CGGTC	2065	
Dog_canine_distemper		TGAATTGGCGTTATGAGACCATCAGTATTTGCTCAGAGATTAAATGAAATCTA
TGGTC	2065	
Ferret,		TGAATTGGCGTTATGAGACCATCAGTATTTGCTCAGAGATTAAATGAAATCTA
TGGTC	2065	
Porcine		TAAATTGGCGTTATGAGACAATAAGCATCTATGCCAGAGGTTAAATGAGATTAA
TGGAC	2065	
Phyllostomus		TAAATTGGCGTTATGAAACAATCAGTATATGCTCAGAGATTGAACGAGATTAA
CGGGC	2065	
* *		

Hendra		TACCCGGTTCTTAACGGATGCACAAACGATTAGAGAAGTCAGTCATTATGT
CGCAG	2455	
Nipah		TACCTGGATTTTAATTGGATGCACAAACGACTAGAAAGATCTGTTATCTATGT
TGCAG	2455	
Niniventer		TTAAAGACTTCTTCAATGGTTACACAATATACTTGAAAAGTCAGTATTGTATGT
AAGTG	2164	
Berylmys		TGCCAAATTCTTCAATGGTTACACAATATACTTGAAAAGTCAGTATTGTATGT
TAGTG	2128	
Gierle		TTCCCAACTTCTTCAATGGCTCATCGAGTTCTGAAAAATCAGTACTTTATGT
AAGTG	2152	
Feline		TGCCTGGATTTCCAGTGGCTCACAAGATTTGGAGAAATCTGTTCTACGT
TAGTG	2195	
Dolphin		TGCCTTCATTCTTCCAGTGGCTACACAAGAGGTTGGAGAAATCAGTCCTATATGT
AAGCG	2125	
Saiga_antelope,		TACCATCCTTCTTCAATGGTTACACAGGATATTGGAAAAATCCGTACTCTACGT
CAGTG	2125	
Goitered_gazelle,		TACCATCCTTCTTCAATGGTTACACAGGATATTGGAAAAATCCGTACTCTACGT
CAGTG	2125	
Domestic_sheep,		TACCATCCTTCTTCAATGGTTACACAGGATTTGGAAAAATCCGTACTCTACGT
CAGTG	2125	
Wild_goat,		TACCATCCTTCTTCAATGGTTACACAGGATATTGGAAAAATCCGTACTCTACGT
CAGTG	2125	
Bharal,		TACCATCCTTCTTCAATGGTTACACAGGATATTGGAAAAATCCGTACTCTACGT
CAGTG	2125	
Domestic_goat,		TACCATCCTTCTTCAATGGTTACACAGGATATTGGAAAAATCCGTACTCTACGT
CAGTG	2125	
Measles		TACCATCCTTCTTCAATGGTTACACAGGATATTGGAAAAATCCGTACTCTACGT
AAGTG	2147	
Rinderpest		TACCATCCTTCTTCAATGGTTACATAGGCGCCTTGAAAGATCAGTATTGTATGT
CAGTG	2125	
Phocine_distemper_north_sea		TTCCCTCATTTCATGGCTGCATAAGAGGCTTGAAACCTCTGCTCTATGT
GAGTG	2147	
Phocine_distemper_caspian_sea,		TCCCCTCATTTCATGGTTACACAGAAGATTGGAACAGTCGATCTTACGT

AAGTG	2125	TCCCCTCATTTCATGGTTGCACAGAAGATTGAAACAGTCGATCTTACGT
Dog_canine_distemper		
AAGTG	2125	TCCCCTCATTTCATGGTTGCACAGAAGATTGAAACAGTCGATCTTACGT
Ferret,		
AAGTG	2125	TCCCCTCTTCTTGATGGTTACATAAAAGGTTAGAGAAGTCTGTACTGTATGT
Porcine		
CAGCG	2125	TCCCTTGTTCCTTGATTGGCTACATAAAAGGTTAGAAAATCAGTGTACGT
Phyllostomus		
AAGTG	2125	

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Hendra		ATCCTAATTGCCACCAGACATCGGGAAACATATAAACCTGATGATACTCCTGA
AGATG	2515	ACCCTAATTGCCCTTAATATTGACAAACATATGAACTAGAAAAACTCCTGA
Nipah		ATCCCTCTGCCACCAGGATTGACTGTTACAAGGCTTGATGCTCCAAA
AGATG	2515	ATCCATATTGTCCTCCTGACTTAGATGATCATTGAGATTAGATGATGTTCCAAA
Niniventer		ATCCTTATTGCCCTGACCTGGATGCTCACTGTGATTAGACAATGTAGCAA
TGACC	2224	ATCCATCTAGTCCACCTGACTTGATCAACATGTCGATATAGAATCAGTCCAAA
Berylmys		ATCCTCACTGTCCACCAGATCTGATACTCATATGGATTAGATGCCGTCCAAA
TGATC	2188	ACCCACATTGTCCTCCGATCTAGATAATCATATCCCTGGACAGTGTCCCAA
Gierle		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
TCATC	2212	ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
Feline		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
TGACC	2255	ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
Dolphin		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
CTCTC	2185	ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
Saiga_antelope,		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
TGCC	2185	ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
Goitered_gazelle,		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
TGCC	2185	ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
Domestic_sheep,		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
TGCC	2185	ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
Wild_goat,		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
TGCC	2185	ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
Bharal,		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
TGCTC	2185	ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
Domestic_goat,		ACCCACATTGCCCTCCGACCTAGATAATCATATCCCTGGACAGTGTCCCAA
TGCC	2185	ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
Measles		ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
TGACC	2207	ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
Rinderpest		ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
TGATC	2185	ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
Phocine_distemper_north_sea		ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
TTCTC	2207	ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
Phocine_distemper_caspian_sea,		ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
CTCTC	2185	ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
Dog_canine_distemper		ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
CTCTC	2185	ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
Ferret,		ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
CTCTC	2185	ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
Porcine		ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
TCAAC	2185	ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
Phyllostomus		ACCCCTCATTGCCCTCCGACCTTGACGCCATGTCCGTTATGCAAAGTCCCAA
TAACC	2185	

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Hendra		ACATATTATCCATTACCAAAAGGCAGGATTGAAGGTTAGTCAGAAGACTTG
GACGA	2575	ATATATTCAATTCTAAAGGCAGGATTGAAGGATAGCAAAAAACATG
Nipah		ATATTTCAATTCTAAAGGCAGGATTGAAGGATAGCAAAAAACATG
GACTA	2575	ATATCTATATAAAATATCAATGGGAGGAATAGAAGGTTCTGTCAAAAGATGTG
Niniventer		ATATCTATATAAAATATCAATGGGAGGAATAGAAGGTTCTGTCAAAAGATGTG
GACAA	2284	ATATCTACATCAAGTATCAATGGGAGGAATAGAAGGCTCTGTCAAAAGATGTG
Berylmys		ATATCTTATCAAGTACCGATGGGTGGAATAGAGGGTTCTGTCAAAAGATGTG
GACAA	2248	
Gierle		
GACTA	2272	
Feline		

GACCA	2315	AAATATTTATAAAGTACCCAATGGGAGGGATCGAAGGGATACTGTCAGAAGCTCTG
Dolphin		
GACAA	2245	AAATATTCACTCAAGTACCCAATGGCGGAATAGAAGGTTATTGCCAAAAACTATG
Saiga_antelope,		
GACAA	2245	AAATATTCACTCAAGTACCCAATGGCGGAATAGAAGGTTATTGCCAAAAACTATG
Goitered_gazelle,		
GACAA	2245	AAATATTCACTTAAGTACCCCATGGCGGAATAGAAGGTTATTGCCAAAAACTATG
Domestic_sheep,		
GACAA	2245	AAATATTCACTTAAGTACCCCATGGCGGAATAGAAGGTTATTGCCAAAAACTATG
Wild_goat,		
GACAA	2245	AAATATTCACTTAAGTACCCAATGGCGGAATAGAAGGTTATTGCCAAAAACTATG
Bharal,		
GACAA	2245	AAATATTCACTTAAGTACCCAATGGCGGAATAGAAGGTTATTGCCAAAAACTATG
Domestic_goat,		
GACAA	2245	AAATATTCACTTAAGTACCCAATGGCGGAATAGAAGGTTATTGCCAAAAACTATG
Measles		
GACCA	2267	AAATCTTCATCACTACCCATGGGAGGTATAGAAGGGTATTGTCAGAAGCTGTG
Rinderpest		
GACAA	2245	AGATTTTCATCAAATACCCATGGGGGGGATAGAAGGCTATTGTCAAAACTGTG
Phocine_distemper_north_sea		
GACAA	2267	AGATATTCAATAAAATATCCAATGGGAGGAGTCGAAGGGTATTGCCAAAAATTATG
Phocine_distemper_caspian_sea,		
GACTA	2245	AAATATTCACTCAAATACCCAATGGGGGGGGTGGAGGGTTATTGTCAGAAGTTGTG
Dog_canine_distemper		
GACTA	2245	AAATATTCACTCAAATACCCAATGGGAGGGTGGAGGGTATTGTCAGAAGTTATG
Ferret,		
GACTA	2245	AAATATTCACTCAAATACCCAATGGGAGGGTGGAGGGTATTGTCAGAAGTTATG
Porcine		
GACCA	2245	AAATCTTATCAAATACCCGATGGGTGGAATTGAGGGTATTGCCAAAAAGTTATG
Phyllostomus		
GACTA	2245	AAATCTTATCAAATACCCATGGGTGGTATTGAAGGGTATTGCCAAAAACTGTG

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Hendra		TCGCAACAATTCCCTTCTGTTCTCAGTGCCTACGAAACAAATACAAGGATTGC
AGCTA	2635	
Nipah		TAGCAACTATCCCCTTTTATTCTTGAGTGCCTATGAGACAAACACGAGGATTGC
TGCAA	2635	
Niniventer		TCAGTACTATACCACTATTGTATCTGCAGCATATGAGACCGGTGTCGAATTTC
ATCAT	2344	
Berlylmys		TAAGTACAATACCTTTCTTATCTGCCGGGTATAATGTAGGGTAAGGATTTC
ATCCT	2308	
Gierle		TAAGCACTATCCCTTATCTATACTTAGCTGGTTACGAAACAGGGTCAGGATCTC
ATCAC	2332	
Feline		TTAGTACAATTCCGTTCCATATTAGCAGCTTGATACAGGGTTAGAATCTC
ATCAT	2375	
Dolphin		TAAGTACAATACCCCTACCTGTACCTAGCGGCTCATGAGAGTGGAGTTAGGATTGC
CTCAT	2305	
Saiga_antelope,		TCAGCACTATACCATACTTGTATCTGCAGCCTATGAGAGCGGAGTAAGAATCGC
CTCAC	2305	
Goitered_gazelle,		TCAGCACTATACCATACTTGTATCTGCAGCCTATGAGAGCGGAGTAAGAATCGC
CTCAC	2305	
Domestic_sheep,		TCAGTACTATACCATACTTGTATCTGCAGCCTATGAGAGCGGAGTAAGAATCGC
CTCAC	2305	
Wild_goat,		TCAGTACTATACCATACTTGTATCTGCAGCCTATGAGAGCGGAGTAAGAATCGC
CTCAC	2305	
Bharal,		TCAGTACTATACCATACTTGTATCTGCAGCCTATGAGAGCGGAGTAAGAATCGC
CTCAC	2305	
Domestic_goat,		TCAGTACTATACCATACTTGTATCTGCAGCCTATGAGAGCGGAGTAAGAATCGC
CTCAC	2305	
Measles		TCAGCACCATTCCTACTTACCTGGCTGCTTATGAGAGCGGGTAAGGATTGC
TTCGT	2327	
Rinderpest		TTAGCACTATCCCCTATCTTACTTGGCTGCACATGAGAGCGGGTCAGGATTGC
CTCTC	2305	
Phocine_distemper_north_sea		TTAGCACTATACCATACTGTACTTAGCGGCACATGAAAGCGGTGTTAGAATTGC
ATCAC	2327	
Phocine_distemper_caspian_sea,		TTAGCACCATACCTTATTGTACTTGGCGGCACATGAGAGCGGTGTCAGAATTGC
ATCAC	2305	

Dog_canine_distemper	TTAGCACCATACTTATCTGTACTTGGCGGCACATGAGAGTGGTGTCAAGAATTGC
ATCAC 2305	
Ferret,	TTAGCACCATACTTATCTGTACTTGGCGGCACATGAGAGTGGTGTCAAGAATTGC
ATCAC 2305	
Porcine	TAAGCACTATCCCCTATCTTACTTGTCACTGAATGCGGAGTGAGAATAGC
TTCTT 2305	
Phyllostomus	TTAGCACCATACTTACTTACCTTGCAGCTCATGAGTGCAGGGTCAGGATTGC
ATCTT 2305	
*	* * * * * * * * * * * * *
Hendra	TAGTCAGGGAGACAATGAGTCAATTGCCATAACTCAGAAGGTCCACCCCTAATT
ACCTT 2695	
Nipah	TTGTCCAAGGGAGACAATGAATCAATTGCTATCACTCAAAAGTTCATCCTAATCT
TCCCT 2695	
Niniventer	TGGTTCAAGGGAGATAATCAGGCCATTGCAGTGACAAAGAGGGTACCCCTCATCATG
GCCGT 2404	
Berylmys	TAGTACAAGGGGATAATCAAGCTATAGCTGTCACTAAGAGGGTACCTCTAGTTG
GCCCT 2368	
Gierle	TGGTACAGGGAGACAATCAAGCCATAGGGTCACTAACGGGTTCCATCATCATG
GCCAT 2392	
Feline	TGGTTCAAGGCATAACCAGGCATTGCAGTAACCAAAAGAGTTCCGTATCTTG
GAGTT 2435	
Dolphin	TGGTTCAAGGGAGACAACCAGACCATAGCGTCACAAAAGAGTCCAAGCACCTG
GCCCT 2365	
Saiga_antelope,	TGGTGCAGGGTGACAATCAGACAATCGCAGTGACAAAAGAGTTCCAAGTTCTTG
GCCTT 2365	
Goitered_gazelle,	TGGTGCAGGGTGACAATCAGACAATCGCAGTGACAAAAGAGTTCCAAGTTCTTG
GCCTT 2365	
Domestic_sheep,	TAGTGCAGGGTGACAATCAGACAATCGCAGTGACAAAAGAGTTCCAAGTTCTTG
GCCTT 2365	
Wild_goat,	TAGTGCAGGGTGACAATCAGACAATCGCGGTGACAAAAGAGTTCCAAGTTCTTG
GCCCT 2365	
Bharal,	TGGTGCAGGGTGACAATCAGACAATCGCAGTGACAAAAGAGTTCCAAGCTCTTG
GCCTT 2365	
Domestic_goat,	TAGTGCAGGGTGACAATCAGACAATCGCAGTGACAAAAGAGTTCCAAGTTCTTG
GCCTT 2365	
Measles	TAGTGCAGGGGACAATCAGACCATAGCCGTAAACAAAAGGGTACCCAGCACATG
GCCTT 2387	
Rinderpest	TTGTCCAGGGAGACAATCAGACAATTGCAGTCACCAAGCGGGTCCCAAGTTCATG
GCCTT 2365	
Phocine_distemper_north_sea	TGGTTCAAGGGAGACAACCAGACTATAGCAGTTACAAAAGAGTCCAAAGCACATG
GCCTT 2387	
Phocine_distemper_caspian_sea,	TTGTCCAAGGTGATAACCAAACATTGCTGTCACTAAAAGAGTACCAAGCACCTG
GTCCT 2365	
Dog_canine_distemper	TTGTCCAAGGTGATAACCAAACATTGCTGTCACTAAAAGAGTACCAAGCACCTG
GTCCT 2365	
Ferret,	TTGTCCAAGGTGATAACCAAACATTGCTGTCACTAAAAGAGTACCAAGCACCTG
GTCCT 2365	
Porcine	TAGTTCAAGGGAGACAACCAGACTATAGCTTTACCAAGCGAGTTCCGAGTTCATG
GCCAT 2365	
Phyllostomus	TGGTCCAAGGGGATAACCAGACAATAGCAGTCACCAAGGGTACCAAGTACATG
GCCCT 2365	
*	* * * * * * * * * * * * *
Hendra	ACAAAGTCAGAAAGAAATTGTCAAGGCAAGCTCAATTATATTGACAGGCT
CAGAA 2755	
Nipah	ACAAGGTAAAGAAAGAGATCTGTCAAAGCAAGCTCAGCTTATTGAAAGGTT
AAGGA 2755	
Niniventer	ATTCTTATAAGAAGGAATCTGTCACTGCAGATCACCACAGACTACTCAAGTGCTT
GAGAA 2464	
Berylmys	ATAGGATAAAAAGAGGAAGCCATGGTAGCTACTAAACTATATTCAAGGAATT
AAGAA 2428	
Gierle	ATAGAGCCAAGAAAGAGGAAGTGTGAAAGCCACTCAGATTACTCAAAGAGTT
AAGAC 2452	
Feline	ACTCAAAGAAAAGGAAGAATCAACTAAAATAACAACACAATATTCTTAATT
AAGAC 2495	

Dolphin	ATGATCTCAAGAAGAGGGAGGCTACAAAATAACTATTGAGTACTCTTAATCCT
AAGGC 2425	
Saiga_antelope,	ATTCACTAAAAAGAGGGAGGCCTCAAGGCCGCTCAAAATTACTCGTAGTCTT
AAGGC 2425	
Goitered_gazelle,	ATTCACTAAAAAGAGGGAGGCCTCAAGGCCGCTCAAAATTACTCGTAGTCTT
AAGGC 2425	
Domestic_sheep,	ATTCACTAAAAAGAGGGAGGCATCCAAGCCGCTCAAAATTACTCGTAGTCTT
AAGGC 2425	
Wild_goat,	ATTCACTAAAAAGAGGGAGGCATCCAAGCTGCTCAAAATTACTCGTAGTCTT
AAGGC 2425	
Bharal,	ATTCACTAAAAAGAAGGAGGCATCCAGAGCCGCTCAAAACTACTCGTGGTCTT
AAGGC 2425	
Domestic_goat,	ATTCACTAAAAAGAGGGAGGCATCCAAGCCGCTCAAAATTACTCGTAGTCTT
AAGGC 2425	
Measles	ACACCTTAAGAAACGGGAAGCTGCTAGAGTAACTAGAGATTACTTGTAATTCT
TAGGC 2447	
Rinderpest	ACCACCTTAAGAAAAGAGAAGCTGCACGCGTGACAAGAGAATATTCTGTCTCCT
GAGGC 2425	
Phocine_distemper_north_sea	ATGAACTGAAAAAGCTGAAGCTAGCCAGTCGAGTGACAAACAGAGTATTTATAGCTT
AAGGC 2447	
Phocine_distemper_caspian_sea,	ATGCCTTGAAGAAATCTGAAGCCAGTCGAGTGACCACAGAATACTTTATAGCCTT
GAGAC 2425	
Dog_canine_distemper	ATGCCTTGAAGAAATCTGAAGCCAGTCGAGTGACCACAGAATACTTTATAGCCTT
GAGAC 2425	
Ferret,	ATGCCTTGAAGAAATCTGAAGCCAGTCGAGTGACCACAGAATACTTTATAGCCTT
GAGAC 2425	
Porcine	ACCACCTTAAGAAGGCAGAAGCAGCTAGAGTCACAATTAAATTATTCATGATT
ACGGG 2425	
Phyllostomus	ACCCTCTTAAAAAGGCCGAGGCAGCTAGAGTGACAGTCATTACTTTATGATCCT
AAGAG 2425	

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Hendra	TGAATCTTAGGGCCTAGGACTCAACTAAAAGCAACAGAGACCATTATAAGTAC
ACACT 2815	
Nipah	TGAACCTTAAGAGCCCTCGGCCACAATCTTAAAGCTACAGAAACTATCATCAGTAC
ACATC 2815	
Niniventer	CAAATCTTGGATGGATAGGTACAATCTTAAAGCGAATGAGACTTTGCTATCGTC
ACACT 2524	
Berylmys	GAATATTAGGATGGATTGGTCACAACCTGAAGGAACATGAAACTTGTGTCATC
CCACT 2488	
Gierle	GGATCCTTGGTTGGGTAGGGCACAATCTCAAGGAACATGAGACCCCTGTTCTC
TCATT 2512	
Feline	AACGCTTACACGATATAGGTCATGAATTGAAAGCAAATGAGACTATTATATCCTC
TCATT 2555	
Dolphin	AGCGATTGCACGATATAGGGCATCATTGAAAGCAAATGAAACAATTATATCCTC
ACATT 2485	
Saiga_antelope,	AAAGATTGCACGATGTAGGTCATCACTTAAAGGCTAATGAGACCATAGTATCTC
TCACT 2485	
Goitered_gazelle,	AAAGATTGCACGATGTAGGTCATCACTTAAAGGCTAATGAAACCATAGTATCTC
TCACT 2485	
Domestic_sheep,	AAAGATTGCACGATGTAGGTCATCACTTAAAGGCTAATGAAACCATAGTATCTC
TCACT 2485	
Wild_goat,	AAAGATTGCACGATGTAGGTCATCACTTAAAGGCTAATGAAACCATAGTATCTC
TCACT 2485	
Bharal,	AAAGATTGCACGATGTAGGTCATCACTTAAAGGCTAATGAAACCATAGTATCTC
TCACT 2485	
Domestic_goat,	AAAGATTGCACGATGTAGGTCATCACTTAAAGGCTAATGAAACCATAGTATCTC
TCACT 2485	
Measles	AAAGGCTACATGACATTGCCATCACCTCAAGGCAAATGAGACAATTGTTCATC
ACATT 2507	
Rinderpest	AAAGACTCCATGATATTGCCATCACCTTAAGGCAAACGAAACTATCGTGTATC
ACACT 2485	
Phocine_distemper_north_sea	AGAGATTGCATGATGTTGGTCACCATTGAAAGCAAACGAAACAAATAGTGTCTC
ACACT 2507	
Phocine_distemper_caspian_sea,	AGAGGTTACATGATGTCGGACATCATTGAAAGCAAATGAAACAATACTCTTC
CCACT 2485	
Dog_canine_distemper	AGAGGTTACATGATGTCGGACATCATTGAAAGCAAATGAAACAATACTCTTC

CCACT	2485	AGAGGTTACATGATGTCGGACATCATTGAAAGCAAATGAAACAATAATCTCTTC
Ferret,		
CCACT	2485	AAAGACTTCATGATATAGGTACCCATTAAAAGCTAATGAAACCATAATTCATC
Porcine		
CCATT	2485	AAAGGCTCCATGACATAGGGCACCATTGAAGGCTAACGAAACTATTATTCATC
Phyllostomus		
CCATT	2485	

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Hendra		TATTTGTCTACTCTAAGAAAATACATTATGATGGTGCAGTATTATCACAAGCCCT
CAAAT	2875	TTTTTATTATTCGAAGAAAATTCAATTATGATGGTGTGCTGTCTCAGGCACT
Nipah		TCTTTGTTATTCAAAGGAATCTTTATGATGGAGTAATTATCCAATCTCT
CAAAT	2875	TTTTTATATACTCAAAAGGGATATATTATGATGGATGTTACTATCCCAGTCGCT
Niniventer		TCTTCGTGTATTCTAAAGGCATCTACTATGACGGGATGCTACTCTCCAATCCCT
TAAGA	2584	TCTTTGTTACTCTAAAGGTATATATTATGATGGAATGCTGATCTCTCAATCACT
Berylmys		TCTTTGTTACTCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
TAAGA	2548	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Gierle		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
CAAAA	2572	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Feline		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
TAAAA	2615	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Dolphin		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
TAAAA	2545	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Saiga_antelope,		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
AAAGA	2545	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Goitered_gazelle,		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
AAAGA	2545	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Domestic_sheep,		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
AAAGA	2545	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Wild_goat,		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
AAAGA	2545	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Bharal,		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
GAAGA	2545	TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
Domestic_goat,		TTTTTGTATATTCCAAAGGGATTATTATGACGGCCTGCTAGTCTCACAATCACT
AAAGA	2545	TTTTTGTCTATTCAAAAGGAATATATTATGATGGCTACTTGTGCTCCAATCACT
Measles		TCTTTGTTACTCCAAGGGATATATTACGACGGACTACTATCTCACAGTCTCT
CAAGA	2567	TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
Rinderpest		TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
CAAAA	2545	TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
Phocine_distemper_north_sea		TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
CAAGA	2567	TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
Phocine_distemper_caspian_sea,		TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
GAAGA	2545	TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
Dog_canine_distemper		TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
GAAGA	2545	TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
Ferret,		TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
GAAGA	2545	TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
Porcine		TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
TAAAA	2545	TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
Phyllostomus		TCTTTGTTACTCAAAGGAATCTATTACGACGGATGTTAATTCTCAATCCCT
TAAAA	2545	

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Hendra		CAATGTCTAGGTGTTTTGGTCAGAGACATTGGTGGACGAGACAAGATCTGC
TTGCA	2935	CAATGTCAAGATGTTGCTTTGGTCAGAGACTCTGGTGGATGAAACTAGATCAGC
Nipah		GCATTGCTAGGTGTGTTCTGGCCAAACCATAGTTGATGAGACTAGATCAGC
TTGTA	2935	GCATATCGAGATGTGCTTTGGTCAGAGACTATTGTTGATGAGACACGCTCTGC
Niniventer		GTATCTCACGATGTGCTTCTGGTCAGAAACTATCGTTGATGAGACTCGCTCTGC
ATGCA	2644	GTATTGCAAGATGTGCTTTGGCTGAAACGATTGTTGATGAGACTAGGTAGCAGC
Berylmys		GTGTGGCTCGGTGTGTTCTGGTCGGAAACAATTGTGGATGAAACTAGAGCAGC
CTGCA	2608	
Gierle		
TTGCA	2632	
Feline		
TTGCA	2675	
Dolphin		

TTGCA	2605	GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
Saiga_antelope,		GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
GTGCA	2605	GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
Goitered_gazelle,		GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
GTGCA	2605	GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
Domestic_sheep,		GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
TTGCA	2605	GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
Wild_goat,		GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
TTGCA	2605	GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
Bharal,		GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
TTGCA	2605	GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
Domestic_goat,		GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
TTGCA	2605	GCATGCCAGATGTGTCTTCTGGTCCGAGACTATAGTGGATGAAACCAGAGCGGC
Measles		GCATCGCAAGATGTGTATTCTGGTCAGAGACTATAGTTGATGAAACAAGGGCAGC
ATGCA	2627	GCATTGCACGATGTGTCTTCTGGTCAGAAACTATAGTTGATGAGACAAGAGCAGC
Rinderpest		GTGTAGCTAGATGTGTGTTTGGTCAGAAACAATAGTAGATGAGACACGAGCTGC
TTGCA	2605	GTATAGCTAGGTGTGTATTTGGTCAGAAACAATAGTGGATGAGACCCGAGCCGC
Phocine_distemper_north_sea		GTATAGCTAGGTGTGTATTTGGTCAGAAACAATAGTGGATGAGACCCGAGCCGC
ATGTA	2627	GTATAGCTAGGTGTGTATTTGGTCAGAAACAATAGTGGATGAGACCCGAGCCGC
Phocine_distemper_caspian_sea,		GTATAGCTAGGTGTGTATTTGGTCAGAAACAATAGTGGATGAGACCCGAGCCGC
GTGCA	2605	GTATAGCTAGGTGTGTATTTGGTCAGAAACAATAGTGGATGAGACCCGAGCCGC
Dog_canine_distemper		GTATAGCTAGGTGTGTATTTGGTCAGAAACAATAGTGGATGAGACCCGAGCCGC
GTGCA	2605	GTATAGCTAGGTGTGTATTTGGTCAGAAACAATAGTGGATGAGACCCGAGCCGC
Ferret,		GTATAGCTAGGTGTGTATTTGGTCAGAAACAATAGTGGATGAGACCCGAGCCGC
GTGCA	2605	GCCTAGCCCCATGTGTTTCTGGTCAGAAACTATTGTAGATGAGACTAGAGCAGC
Porcine		GTATCGCTCGCTGCGTATTTGGTCAGAAACAATTGTAGATGAGACTAGAGCAGC
TTGTA	2605	GTATCGCTCGCTGCGTATTTGGTCAGAAACAATTGTAGATGAGACTAGAGCAGC
Phyllostomus		GTATCGCTCGCTGCGTATTTGGTCAGAAACAATTGTAGATGAGACTAGAGCAGC
CTGTA	2605	GTATCGCTCGCTGCGTATTTGGTCAGAAACAATTGTAGATGAGACTAGAGCAGC

Hendra		GCAATATTAGTACTACCAGCTAAGGCATTGAGAATGGATTATCAAGAAATGT
GGT	2995	
Nipah		GTAACATCAGCACTACAATAGCTAAAGCTATAGAAAATGGTTGTCAAGAAATGT
CGGCT	2995	
Miniventer		GCAATATTCAACAAACACTGGCAAAATCGATTGAAAAGGGCTTTGTAGGTATAC
TAGTT	2704	
Berylmys		GTAACATTGCAACTACAATAGCCAAAGCAATTGAGCGAGGGTGTAGGTATAT
AGCAT	2668	
Sierle		GCAACATAGCAACTACTATTGCCAAGGCTATAGAAAGAGGTTACGATCGCTATAT
TGCTT	2692	
Celine		GTAATATATCTACGACACTCGCAAAGGCAATTGAAAGGGTTATGATAAATTGTT
GGCGT	2735	
Dolphin		GTAATATCTCGACAACTCTGCCAAAAAGCATAGAAAGGGGATTGACCGGTATT
GGCTT	2665	
Saiga_antelope,		GTAATATTGCAACAACTGTCGCTAAGAGTATAGAGAGGGTTATGATAGGTACCT
TGCAT	2665	
Goitered_gazelle,		GTAATATTGCAACAACTGTCGCTAAGAGTATAGAGAGGGTTATGATAGGTACCT
TGCAT	2665	
Domestic_sheep,		GCAATATTGCAACAACTGTCGCCAAGAGTATAGAGAGGGTTATGATAGATACCT
TGCAT	2665	
Wild_goat,		GCAATATTGCAACAACTGTCGCCAAGAGTATAGAGAGGGTTATGATAGGTACCT
TGCAT	2665	
Bharal,		GTAATATTGCAACAACTGTCGCTAAGAGTATAGAGAGGGTTATGATAGGTACCT
TGCAT	2665	
Domestic_goat,		GCAATATTGCAACAACTGTCGCTAAGAGTATAGAGAGGGTTATGATAGGTACCT
TGCAT	2665	
Measles		GTAATATTGCTACACAAATGGCTAAAGCATCGAGAGAGGGTTATGACCGTTATCT
TGCAT	2687	
Rinderpest		GCAACATGCCACGACTATAGCCAAGAGCATAGAGAGAGGGTTGACAGGTACCT
TGCTT	2665	
Phocine_distemper_north_sea		GCAATATCTACAACTCTAGCAAAGGCAATTGAGAAGGGTTATGAGGTACCT
AGCCT	2687	
Phocine_distemper_caspian_sea,		GCAACATTCAACAAACATTAGCGAAAGCCATTGAGAAAGGGTTGACCGATATT
AGCCT	2665	
Dog_canine_distemper		GCAACATTCAACAAACATTAGCGAAAGCCATTGAGAAAGGGTTGACCGATATT
AGCCT	2665	

Ferret,	GCAACATTCAACAAACATTAGCGAAAGCCATTGAGAAAGGTTGACCGATATT
AGCCT 2665	
Porcine	GCAACATATCCACAACCCTGGCTAAATCAATTGAAAAAGGATTGATAGATATCT
AGCCT 2665	
Phyllostomus	GCAATATATCCACCCTTGGCAAAGTCAATTGAAAAGGTTCGACCGTTACCT
AGCCT 2665	

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Hendra		ACTGCATCAACGTCTGAAAGTCATACAGCAACTGCTATTCTACTGAGTTAG
CATCA	3055	
Nipah		ATTGCATCAATATTTGAAAGTAATTCAAGCAGCTCTCATATCAACTGAGTTAG
TATTA	3055	
Niniventer		ACTGCTACAATATCTATAAGACTATTCTCAATTGCTTATTGACTCGGTTTAC
TATCA	2764	
Berlylmys		ATTGCTACTGCATTACAAGACCTACTACAGGTAAATTGTTGCCTTAAGATTAC
AATTA	2728	
Gierle		ATTGCTACAATCTCTATAAAGTGATACTACAGGTGCTAGTTGCTTAAGGTTAC
AATCA	2752	
Feline		ACGCTATCAATATTTATAAAACAATACATCAGGTGTTGATTGCATTGTCCTTAC
GATTA	2795	
Dolphin		ACTCATTGAATGTACTCAAGATTCAACAGATCCTTATCTCCCTAGGGTTAC
AATAA	2725	
Saiga_antelope,		ATTCTTGAAATATCCTCAAGATTTCACAGATCCTTATATCCCTTAACTTAC
TATTA	2725	
Goitered_gazelle,		ATTCTTGAAATATCCTCAAGATTTCACAGATCCTTATATCCCTTAACTTAC
TATTA	2725	
Domestic_sheep,		ATTCTTGAAATATCCTCAAGATTTCACAGATCCTTATATCCCTTAACTTAC
TATTA	2725	
Wild_goat,		ATTCTTGAAATATCCTCAAGATTCTCAACAGATCCTTATATCCCTTAACTTAC
TATTA	2725	
Bharal,		ATTCTTGAAATATCCTCAAGATTTCACAGATCCTTATATCCCTTAACTTAC
TATTA	2725	
Domestic_goat,		ATTCTTGAAATATCCTCAAGATTTCACAGATCCTTATATCCCTTAACTTAC
TATTA	2725	
Measles		ATTCCCTGAACGTCTAAAGTGTACAGCAAATTGATCTCTGGCTTCAC
AATCA	2747	
Rinderpest		ATTCTCTGAACATCCTGAAAGTTACAAACAGATACTAATATCACTGGGTTTCAC
AATAA	2725	
Phocine_distemper_north_sea		ACGCACCTAATATCTGAAAGATCATTCAACAAAGTCTCATCTCATTAGGATTAC
TATTA	2747	
Phocine_distemper_caspian_sea,		ACGCACCTGAAACATTTAAAAATCATTCAACAAAGTATTAATTTCATTAGGATTAC
TATCA	2725	
Dog_canine_distemper		ACACGCTGAACATTTAAAAATCATCCAACAAAGTATTAATTTCATTAGGATTAC
TATCA	2725	
Ferret,		ACACGCTGAACATTTAAAAATCATCCAACAAAGTATTAATTTCATTAGGATTAC
TATCA	2725	
Porcine		ATGCCCTTAACCTTATCAAAACCATAAGCAGCTGTTGATTCACGGGCTTAC
CATCA	2725	
Phyllostomus		ATGCACTCAATCTAATTAAGACCATCCAGCAGCTTTGATCTCACTGGGTTAC
AATCA	2725	

ACGAGACATTGACTGCTGATGTAACATCTCCAATATCCAATACTCGATTGGCT
ACGAGACATTGACACTGGATGTGACATCTCCATTCAAATAATTAGATTGGCT
ATCCAACATATGACAGCGGACATCACCAGACCTATACTTGACAATCCACAGTTACT
ATCCAACAATGACTGAAGATGTCATAAACCCACTCATGTCACAAACAAGTCAGTT
ATCCCACCTCTCACTGACGATGTAATTCTCCCTCTCACACGCAATTATCCCTCT
ATCCTACTATGACACCCAGACATTACAGAACCTTCTACAAGAGTTAGATCTACT
ACACTTCTATGACTCAAGACATAGCAATCCCATTACTGCAGAATCAAGATTGTT

Saiga_antelope, GATAA 2785	ACACAACAATGACTCAGGATGTCGTGGCACCGATCATCGAGAACGGTATTGCT
Goitered_gazelle, GATAA 2785	ACACAACAATGACTCAGGATGTCGTGGCACCGATCATCGAGAACGGTATTGCT
Domestic_sheep, GATAA 2785	ACACAACAATGACTCAGGATGTCGTGGCACCGATCATCGAAAACGGGATTGCT
Wild_goat, GATAA 2785	ACACAACAATGACTCAGGATGTCGTGGCACCGATCATCGAAAACGGGATTGCT
Bharal, GATAA 2785	ACACAACAATGACTCAGGATGTTGTGGCACCGATCATCGAGAACGGTATTGCT
Domestic_goat, GATAA 2785	ACACAACAATGACTCAGGATGTCGTGGCACCGATCATCGAGAACGGTATTGCT
Measles AATAA 2807	ATTCAACCATGACCCGAGATGTAGTCATACCCCTCCTCACAAACAACGATCTCTT
Rinderpest GATAA 2785	ATTCTACAATGACACAAGATGTAGTGGTCCCTTCTATCAAACCATGACCTCCT
Phocine_distemper_north_sea GACTA 2807	ATTCGGCTATGACACAGGATGTAATAGAACCACTGCTGCAAAACCACTGTCTCTT
Phocine_distemper_caspian_sea, GACCA 2785	ATTCAGCTATGACACGGGATGTGATAGAACCCCTCGTACAAGATCACTGTCTCTT
Dog_canine_distemper GACCA 2785	ATTCAGCGATGACACGGGATGTGATAGAACCCCTTTACAAGATCACTGTCTCTT
Ferret, GACCA 2785	ATTCAGCGATGACACGGGATGTGATAGAACCCCTTTACAAGATCACTGTCTCTT
Porcine AACAA 2785	ATGGATCCATGACAGACGATGTGGTTAACCCCTTTAAAAGATCATAGAATTAT
Phyllostomus TACTA 2785	ATGGATCGATGACGGATGACATAGTGGACCTTTCTGGCAAATAATAGGATCAT

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Hendra AATAT 3175	CTGCATCCGAATTCCGCACCAATTGGAGGTTCAATTACTGAATTATCAAG
Nipah AATTT 3175	CAGCTGCATTAATCCGGCACCTATTGGAGGATTCAATTACCTTAATTGTCTAG
Niniventer ATTAT 2884	GTCTATCTGTTCTTCATCTCCTATAGGAGGGTCAACTATTAAATATGAGCAG
Berylmys ATTGT 2848	AGATATGCCTCATCCCTGCACCAATTGGAGGATTAACTACTAAACATGAGTAG
Gierle GCTAT 2872	CAATTGCTTAATTCTGCCCAATAGGAGGGTTAACTATCTTAAATATGAGCAG
Feline GTTAT 2915	ATCTAGTTCTGATTCCCTGCACCATTAGGGGCATGAACTATATGAACATGAGCAG
Dolphin ATTAT 2845	AGATGGCACTACTACCTGCTCTATAGGTGGCCTCAATTATCTTAAATATGAGCAG
Saiga_antelope, GTTAT 2845	GGATGGCACTTTGCCAGCACCCATGGGGGTCTCAATTATCTTAAACATGAGCAG
Goitered_gazelle, GTTAT 2845	GGATGGCACTCTGCCAGCACCCATGGGGGTCTCAATTATCTTAAACATGAGCAG
Domestic_sheep, GTTAT 2845	GGATGGCACTCTGCCAGCACCCATGGGGGTCTCAATTATCTTAAACATGAGCAG
Wild_goat, GTTAT 2845	GGATGGCACTCTGCCAGCACCCATGGGGGTCTCAATTATCTTAAACATGAGCAG
Bharal, GTTAT 2845	GGATGGCACTCTGCCAGCACCCATGGGGGTCTCAATTATCTTAAACATGAGCAG
Domestic_goat, GTTAT 2845	GGATGGCACTGTTGCCGCTCTATTGGGGGATGAATTATCTGAATATGAGCAG
Measles GCTGT 2867	GGATGGCCCTTTACCTGCTCAATCGGGGTATGAACTACTAAACATGAGTAG
Rinderpest GTTAT 2845	AAATGGCAATACTCCTGCTCTATTGGTGGCTAAATTACCTGAATATGAGTAG
Phocine_distemper_north_sea ACTCT 2867	AGATGGCAATTCTCCCCGCACCCATTGGCGGTCTTAATTACCTCAATATGAGTAG
Phocine_distemper_caspian_sea, GCTCT 2845	AGATGGCAATTCTCCCCGCACCCATTGGCGGTTTAATTACCTCAATATGAGTAG
Dog_canine_distemper GCTCT 2845	AGATGGCAATTCTCCCCGCACCCATTGGCGGTTTAATTACCTCAATATGAGTAG
Ferret,	AGATGGCAATTCTCCCCGCACCCATTGGCGGTTTAATTACCTCAATATGAGTAG

GCTCT	2845	
Porcine		AGATGGCACTCCTCCCTGCCCGATAGGAGGATTCAATTATTAACATGAGCCG
CCTGT	2845	
Phyllostomus		AGATGGCACTGCTACCTGCTCCTATAGGAGTTTAATTACTTAAACATGAGCCG
TCTAT	2845	

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Hendra		TTGTAAGAAATATAGGAGACCCTGTGACTGCATCACTAGCCGATCTAAAGAGAAT
GATAG	3235	TTGTTAGAAATATAGGTGATCCGGTTACAGCATCTTGGCTGATCTTAAGAGAAT
Nipah		TTGTCAGGAATATTGGTGATCCCATTACTGCATCGTTGCAGACCTCAAGAGATT
GATTG	3235	TCGTAAGAAATATAGGTGATGTTACCGCATCTTGCAGATATCAAAAGAAT
Niniventer		ATGTAAGGAATATTGGGATGTAGTTACAGCATCACTGCAGATGTCAAAAGAAT
AATCC	2944	TTGTTAGGAATATAGGAGATCCCATTACTGCTTCATTGCTGATATAAGCGCAT
Berylmys		TCGTAAGGAATATAGGTGATCCAGTTACGTCCCTTTAGCTGACCTCAAAAGAAT
GATCA	2908	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Gierle		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATTA	2932	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Feline		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATTG	2975	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Dolphin		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATAA	2905	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Saiga_antelope,		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATAG	2905	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Goitered_gazelle,		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATAG	2905	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Domestic_sheep,		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATAG	2905	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Wild_goat,		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATAG	2905	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Bharal,		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATAG	2905	TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
Domestic_goat,		TTGTGAGAAATATCGGTGACCCGGTCACCTCCTCTATAGCCGACCTGAAGAGGAT
GATAG	2905	TTGTGAGAAACATCGGTGATCCAGTAACATCATCAATTGCTGATCTCAAGAGAAT
Measles		TTGTGAGAAACATCGGTGATCCAGTAACATCATCAATTGCTGATCTCAAGAGAAT
GATTC	2927	TTGTGAGAAACATCGGTGATCCAGTAACATCATCAATTGCTGATCTCAAGAGAAT
Rinderpest		TTGTGAGAAACATCGGTGATCCAGTAACATCATCAATTGCTGATCTCAAGAGGAT
GATTG	2905	TTGTAAGGAATATAGGGGACCCTGTTACGTCTTCATTGCTGACATCTCAAGCGAAT
Phocene_distemper_north_sea		TTGTCAGGAATATCGGGATCCCGTGACATCTTCTATTGCTGACCTCAAACGAAT
GATTA	2927	TTGTCAGGAATATCGGGATCCCGTGACATCTTCTATTGCTGACCTCAAACGAAT
Phocene_distemper_caspian_sea,		TTGTCAGGAATATCGGGATCCCGTGACATCTTCTATTGCTGACCTCAAACGAAT
GATCC	2905	TTGTCAGGAATATCGGGATCCCGTGACATCTTCTATTGCTGACCTCAAACGAAT
Dog_canine_distemper		TTGTCAGGAATATCGGGATCCCGTGACATCTTCTATTGCTGACCTCAAACGAAT
GATCC	2905	TTGTCAGGAATATCGGGATCCCGTGACATCTTCTATTGCTGACCTCAAACGAAT
Ferret,		TTGTCAGGAATATCGGGATCCCGTGACATCTTCTATTGCTGACCTCAAACGAAT
GATCC	2905	TCGTTAGAAATATAGGCGATCCGGTCACATCATCATTGGCTGATTAAAAAGAAT
Porcine		TTGTCAGGAACATCGGCGACCCAGTCACGTCGTCACTGGCTGATCTAACCGAT
GATTA	2905	
Phyllostomus		
GATCA	2905	

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Hendra		AACATGACTTGATGACAGATAAAGTTCTCAAAAAGTGTGATGAATCAAGAACCAAGG
CGATG	3295	ATCACAGTATTATGACTGAAAGCGTATTACAAAAAGTTATGAATCAAGAACCTGG
Nipah		AGTCTGGATTACTCCACTCATCTATTACAGAGAGTTATGAATCAACAAACCTGG
TGATG	3295	TGGCAAATTATTACCATCTAACATATTAGATAAAATCATGACTCAAGATGCTGG
Niniventer		TAGTTGGCTGCTCCCAAGCACTATTCTAGGGAAGATTATGACCCAAGATCGAGG
TGAAT	3004	AATGTGGGTTGTTAGGATGTAGTATTCTGTACAAATAATGTACCAAAATGTGG
Berylmys		TTGCAGGGATTATGCCGTGAGGAGTCGATCCACCAAGTTATGACACAAACCAACCAGG
GGATT	2968	ATGCCGGGCTAATGCCAGAAGAACATTGCATCAAGTGTGATGACCCAGACCCGGG
Gierle		
GGACT	2992	
Feline		
TTCCT	3035	
Dolphin		
GGATT	2965	
Saiga_antelope,		

AGAAT 2965	ATGCCGGCTAATGCCAGAAGAACATTGCATCAAGTGTGATGACCCAGACCCGGG
Goitered_gazelle,	
AGAAT 2965	ATGCTGGCTAATGCCAGAAGAACATTGCATCAAGTGTGATGACCCAGACCCGGG
Domestic_sheep,	
AGAAT 2965	ATGCTGGCTAATGCCAGAAGAACATTGCATCAAGTGTGATGACCCAGACCCGGG
Wild_goat,	
AGAAT 2965	ATGCTGGCTAATGCCAGAAGAACATTGCATCAAGTGTGATGACCCAGACCCGGG
Bharal,	
AGAAT 2965	ATGCCGGCTAATGCCAGAAGAACATTGCATCAAGTGTGATGACCCAGACCCGGG
Domestic_goat,	
AGAAT 2965	ATGCTGGCTAATGCCAGAAGAACATTGCATCAAGTGTGATGACCCAGACCCGGG
Measles	
GGACT 2987	TCGCATCACTAATGCCCTGAAGAGACCCCTCCATCAAGTAATGACACAAACAACCGGG
Rinderpest	
TGACT 2965	GTGCGTCACTGATGCCCTGAGGAGACACTTCATCAGGTGATGACACAAACAACCGGG
Phocine_distemper_north_sea	
TGATT 2987	AGTCAGGACTCTGGAGAGGAAATTCTGCATCAGGTTATGACTCAAAACCCAGG
Phocine_distemper_caspian_sea,	
TGACT 2965	GATCAGGCCTTCTGGAGTGGAGATTCTACATCAGGTATGACCCAAATACCCAGG
Dog_canine_distemper	
TGACT 2965	GATCAGGCCTTCTGGAGTGGAGATTCTACATCAGGTATGACTCAATACCCAGG
Ferret,	
TGACT 2965	GATCAGGCCTTCTGGAGTGGAGATTCTACATCAGGTATGACTCAATACCCAGG
Porcine	
TGATT 2965	AAGCAAATCTGCTGAGTGAACAAATTCTCATCAAGTGTGACTCAAGCCCCAGG
Phyllostomus	
TGACT 2965	AAGCAGGTCTCTGAATGAAGTAATTCTCCATCAAGTAATGACACAGAACGCCGGG

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Hendra	CAAGCTTCCTAGATTGGCTAGTGATCCGTATTCAAGGAAATCTACCGGATTCA
GAGTA 3355	CGAGTTTCTGGACTGGGCCAGTGATCCATACTCGGGCAACTGCCTGACTCACA
Nipah	CAACTTACCTTGATTGGCAAGTGATCCATATTCTGCTAATCTCAGCAGTTCA
AAGCA 3355	CTAAATTCTAGACTGGCAAGTGATCCTTACTCTGCAAATTGCCAGCAGTTCA
Niniventer	CAAATATCTGGATTGGCAAGTGATCCCTACTCAGCTAATTACAGCTGTTCA
AAGTA 3064	CCAAATACTTAGACTGGCTAGTGATCCTTATTCAATAACCTTCCTATAGCCA
Berylmys	CCTCTTCCTAGATTGGCGAGTGATCCCTACTCAGCTAATCTACCATGTGTCCA
AAGTA 3028	CATCTTACCTAGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Gierle	CATCTTACCTAGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
AAGCA 3052	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Feline	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
AAGTA 3095	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Dolphin	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
GAGTA 3025	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Saiga_antelope,	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
GAGTA 3025	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Goitered_gazelle,	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
GAGTA 3025	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Domestic_sheep,	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
GAGTA 3025	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Wild_goat,	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
GAGTA 3025	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Bharal,	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
GAGTA 3025	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
Domestic_goat,	CATCCTACCTCGATTGGCAAGTGACCCTATTCTGCCAACCTACCCGTACA
GAGTA 3025	CTTCATTCTAGACTGGCTAGCGACCCTACTCAGCAAATCTGTATGCGTCCA
Measles	CATCATTCTCGACTGGCTAGTGACCCCTATTCTGCTAACCTAGTATGCATTCA
GAGCA 3047	CCACTTACTTGGACTGGCCAGTGACCCCTACTCAGCTAATCTACCATGCGTCCA
Rinderpest	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
AAGCA 3025	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
Phocine_distemper_north_sea	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
AAGCA 3047	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
Phocine_distemper_caspian_sea,	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
GAGCA 3025	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
Dog_canine_distemper	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
GAGCA 3025	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
Ferret,	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA
GAGCA 3025	CTTCTTATTAGATTGGCAAGTGACCCCTATTCTGCCAATCTGCCCTGTGTCCA

Goitered_gazelle, TTTCC 3145	TGCTGAAAGGGTTATTCATGAGGGGAGTAGAGATGAAGACGAGGAGCTGCAAG
Domestic_sheep, TTTCT 3145	TGCTGAAAGGATTGTTCATGAGGGGAGTAGAGATGAAGACGAGGAGCTGCAAG
Wild_goat, TTTCT 3145	TGCTGAAAGGATTGTTCATGAGGGGAGTAGAGATGAAGACGAGGAGCTGCAAG
Bharal, TTTCC 3145	TGCTGAGAGGATTGTTCATGAGGGGAGTAGAGATGAAGACGAGGAGCTGCAAG
Domestic_goat, TTTCC 3145	TGCTGAAAGGATTGTTCATGAGGGGAGTAGAGATGAAGACGAGGAGCTGCAAG
Measles ATTCC 3167	TGTTAAAAGGGTTATTCCATGATGACAGTAAAGAAGAGGACGAGAGACTGGCGGC
Rinderpest CTTTC 3145	TGCTCAGAGGTTATTCCATGATGACAGCAAGGAAGAAGATGAGCAATTAGCCAC
Phocine_distemper_north_sea TTTTT 3167	TGTTAAAGGGATTATTCATGATGACAGTCAGGCCGAGGATGAGGCCCTAGCTGC
Phocine_distemper_caspian_sea, TTTCT 3145	TGCTGAGAGGATTGTTCCATGATGAAAGTCAGGATGAGGATGAAGCTTAGCAGC
Dog_canine_distemper TTTCT 3145	TGCTGAGAGGATTGTTCCATGATGAAAGTCAGGATGAGGATGAAGCTTAGCAGC
Ferret, TTTCT 3145	TGCTGAGAGGATTGTTCCATGATGAAAGTCAGGATGAGGATGAAGCTTAGCAGC
Porcine TTTCC 3145	TGCTAAAGGGTTGTTCACAGTGAAAGCCAGGAAGAGGATGAGACCCTAGCCAG
Phyllostomus ATTCT 3145	TGCTGAAAGGGCTGTTCCATCATGAGAGCCAAGAAGAGGATGAGTCCTAGCGGC

* * * * * * * * * * * * * * *

Hendra TTTGA 3535	TAATGGATCGTAGAATTATATTGCCAGAGCCGCACATGAAATTTAGATAATT
Nipah ATTGA 3535	TAATGGACAGGAGGGTTATATTACCTAGAGCGCTCATGAGATACTGGATAATT
Niniventer TGTCA 3244	TATTAGATAGAGAAATTATTATTTCCTAGAGCAGCCCAGTGAATTTAGACAATAC
Berylmys TTTGA 3208	TGATGGATAGGGATATAATAATACCAAGAGCTGCCATGAAATTTGGATAATAG
Gierle CTTGA 3232	TTCTGGACAGAGCGATCATTGTACCTAGAGCAGCACACGAAATTCTGATAACAG
Feline AGTAA 3275	TGTTAGACCGACACTTAATAATCCCTAGAGCAGCACAGGAGATTATCAAATT
Dolphin CATCG 3205	TCATGGATAGACACATCATCAGACCTAGAGCAGCTCATGAGATTCTGACAACAG
Saiga_antelope, TATAA 3205	TAATGGATCGGCATATAATTGTTCAAGAGAGCTGCACATGAAATCTAGACCATAG
Goitered_gazelle, TATAA 3205	TAATGGATCGGCATATAATTGTTCAAGAGAGCTGCACATGAAATCTAGACCATAG
Domestic_sheep, CATAA 3205	TAATGGATCGGCATATAATTGTTCAAGAGAGCTGCACATGAAATCTAGACCATAG
Wild_goat, CATAA 3205	TAATGGATCGGCATATAATTGTTCAAGAGAGCTGCACATGAAATCTAGACCATAG
Bharal, TATAA 3205	TAATGGATCGGCATATAATTGTTCAAGAGAGCTGCACATGAAATCTAGACCATAG
Domestic_goat, CATAA 3205	TAATGGATCGGCATATAATTGTTCAAGAGAGCTGCACATGAAATCTAGACCATAG
Measles TGTCA 3227	TCATGGACAGGCATATTATAGTACCTAGGGCAGCTCATGAAATCTGGATCATAG
Rinderpest TATAA 3205	TAATGGACAGGAGTGTAATAGTCCGAGAGCCGCCACGAAATATTAGACCATAG
Phocine_distemper_north_sea GATCA 3227	TAATGGACAGAAAGGGTTATCATTCAAGAGAGCTGCACATGAAATTCTNGATAACAC
Phocine_distemper_caspian_sea, GATCA 3205	TAATGGATAGGAAAATTATTATCCAAGGGCTGCACATGAAATTCTGGATAACAC
Dog_canine_distemper AATCA 3205	TGATGGATAGGAAAATTATTATCCAAGGGCTGCACATGAAATTCTAGATAACAC
Ferret, GATCA 3205	TGATGGATAGGAAAATTATTATCCAAGGGCTGCACATGAAATTCTAGATAACAC
Porcine	TGATGGATAGAGGAGTGATTACCTAGGGCGCTCATGAGATCTAGACAACAC

TATTA	3205	TAATGGATAGAGGGTAATTATACCCAGAGCAGCCCAGAGATCCTGGACAATAC
Phyllostomus		
AATCA	3205	
* * * * *		
Hendra		CAGGTGCTAGAGAGGAAATTGCTGGATTACTGACACAACAAAGGGCTAATAAG
ATCAG	3595	CAGGTGCCAGAGAGGAAATTGCTGGTTATTAGATACAACAAAGGCTTGATCAG
Nipah		CAGGTGCTAGAGAGAGTATTGCAGGTCTTGGACACAACAAAGGATTAATTAG
ATCAG	3595	CTGGTGCAAGAGAAAGCATAGCAGGTATGCTGATACTACTAAAGGGTTAATTAG
Niniventer		CTGGGGCGAGAGAGAGCATTGCAGGTATGCTGACACAACAAAGGGTTGATTAG
GAGCG	3304	CAGGTGCTAGAGAGAGTATTGCAGGTCTTGGACACAACAAAGGATTAATTAG
Berylmys		CTGGGGCAAGAGAAAGCTATAGCAGGTATGCTGACACTACTAAAGGGTTAATTAG
GACTG	3268	CTGGGGCAAGAGAAAGCTATAGCAGGTATGCTGACACAACAAAGGGTTGATTAG
Gierle		CAGGTGCTAGAGAGAGTATTGCAGGTCTTGGACACAACAAAGGGTTGATTAG
AACAG	3292	CCGGAGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
Feline		CCGGAGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
TGCTA	3335	CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
Dolphin		CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
GGCTA	3265	CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
Saiga_antelope,		CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
AACAA	3265	CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
Goitered_gazelle,		CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
AACAA	3265	CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
Domestic_sheep,		CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
AACAA	3265	CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
Wild_goat,		CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
AACAA	3265	CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
Bharal,		CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
AACAA	3265	CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
Domestic_goat,		CCGGGGCAAGAGAAAGCTATAGCCGGATGTTGGACACCACCAAGGGCTGATTAG
AACAA	3265	Measles
Measles		CAGGGGCAAGAGAGTCTATTGCAGGCATGCTAGATACCAACAAAGGCCTGATTAG
AGCCA	3287	CTGGAGCCCGGAAAGCAATTGCAGGGATGCTGACACTAAAGGACTCATCAG
Rinderpest		CGGGTGCAAGGGAAGCAATTGCAGGGATGCTGACAGCAAGGGACTGATTAG
GAUTA	3265	CAGGTGCAAGAGAGGCAATGCCGGATGCTAGACACCACAAAGGGTTGATACG
Phocine_distemper_north_sea		CGGGTGCAAGAGAGGCAATTGCCGGATGCTAGACACCACAAAGGGTTGATAAG
GGCAA	3287	CGGGTGCAAGAGAGGCAATTGCCGGATGCTAGACACCACAAAGGGTTGATAAG
Phocine_distemper_caspian_sea,		CCGGTGACGAGAGGCAATTGCCGGATGCTGACACCACCAAGGGCTTATTAG
AGCAA	3265	CAGGTGCCAGGGAGCCATTGCCGGATGCTGGACACCACCAAGGGACTCATTAG
Dog_canine_distemper		* * * * *
AGCAA	3265	* * * * *
Ferret,		* * * * *
AGCAA	3265	* * * * *
Porcine		* * * * *
GGCTA	3265	* * * * *
Phyllostomus		* * * * *
AGCAA	3265	* * * * *
Hendra		
TTATA	3655	GATTGAAAAAGAGCAGGGATACAACCTAAGTTAGTGTCTAGACTGTCTAACCATGA
Nipah		GGCTAAGAAAGAGTGGACTTCAGCCAAAGTTAGTTCTAGATTATCTCATCATGA
TTATA	3655	GGTTACACAGGGGTGGTTAAGACCTACCTTAATAAGGAAATCTAATTCTCATGA
Niniventer		GGCTAAACGAGGAGGGTTGAGACCTCATATTGTCCAAAATTATCCTTATACGA
CTATG	3364	GATTGCGAAAGGCAGGGCTGAGACCTAGTCTAATCACCAAAATTGTCCCATTACGA
Berylmys		GTATGTCAAGAGGTGGTTGACCTCATCACTTGTAAATTATCAACATATGA
TTACA	3328	GTATGAAAGAGGTGGACTGACCCACGAATCATCACGAGATTATCAAATTATGA
Gierle		GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA
TTACC	3352	GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA
Feline		GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA
TTACC	3395	GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA
Dolphin		GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA
TTATG	3325	GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA
Saiga_antelope,		GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA
TTATG	3325	GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA
Goitered_gazelle,		GTATGAAACGGGGCGGCCTCACCCCTCGAGTCTAGCCGCCTTCAATTATGA

TTATG 3325	GTATGAAACGGGGTGCCTCACCCCTCGAGTCTTAGCCGCCTTCAATTATGA
Domestic_sheep, TTATG 3325	GTATGAAACGGGGTGCCTCACCCCTCGAGTCTTAGCCGCCTTCAATTATGA
Wild_goat, TTATG 3325	GTATGAAACGGGGTGCCTCACCCCTCGAGTCTTAGCCGCCTTCAATTATGA
Bharal, TTATG 3325	GTATGAAACGGGGTGCCTCACCCCTCGAGTCTTAGCCGCCTTCAATTATGA
Measles CTATG 3347	GTATGAGGAAGGGGGGTTAACCTCTCGAGTGATAACCAGATTGTCAATTATGA
Rinderpest CTATG 3325	GCTCCAGAAGAGGGGCCTGACCACCAAGAGTGATAGCAAGACTATCCACATATGA
Phocine_distemper_north_sea TTATG 3347	GTATGAGGAGAGGAGGACTTACTCCGAGGATAATAACTCGGTTGTCAACTTATGA
Phocine_distemper_caspian_sea, TTATG 3325	GCATGAAAAGAGGAGGTCTAACCCCTAGAATAATAACCCGTTGTCAACTTACGA
Dog_canine_distemper TTATG 3325	GCATGAAAAGAGGAGGTCTAACCCCTAGAATAATAACCCGTTGTCAACTTACGA
Ferret, TTATG 3325	GCATGAAAAGAGGAGGTCTAACCCCTAGAATAATAACCCGTTGTCAACTTACGA
Porcine CTATG 3325	GCATGCAAAGAGGAGGCCTAACTCCAAGGATAATCACGCGATTATCCACATATGA
Phyllostomus TTATG 3325	GTATGCAGAGAGGGGGGTTAACTCCAAGAATCATTACTAGGCTGACCACCTATGA

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Hendra	ATCAGTTCTGATACTCAATAGACTTTGTCCAATAAAAGAGAAACGATCTTAT
ATCCC 3715	ATCAATTTTAATACTGAACAAACTCTATCAAACAGAAGACAAATGACTTGAT
Nipah	AACAATATAAAATGCCATAGCAATGTTACATAATAATCAGTTAACCGCTGAT
ATCAT 3715	GGCAATTCAAAATGCCATTAGATTACTTGAAAACCAAAAGGCTGATGACCTTAT
Niniventer	GGCAGTTCCAGAATGCAATCAGGCTCTAGAGAACCCAAGAAACAATGATTTAAT
TTCGA 3424	AACAGTTAGAACATGCTTGAATGGCTTATGCTCTACTACGGGAATTGCTGT
Berylmys	ATCAGTCTAAATGGGAATATCATTAAACTGTGAAGAACGGAACAATCTTAT
TGATG 3388	AACAATTCCGATCCGGGATAACACTATTAAACAAAGAAAGGGCAGTGTATCTCAT
Gierle	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
TGACC 3412	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Feline	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
AAGCG 3455	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Dolphin	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
CGATA 3385	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Saiga_antelope, TGACA 3385	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Goitered_gazelle, TGACA 3385	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Domestic_sheep, TGACA 3385	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Wild_goat, TGACA 3385	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Bharal, TGACA 3385	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Domestic_goat, TGACA 3385	AACAATTCCGATCCGGGATAACACTATTGACAAAGAAAGGGCAGTGTATCTCAT
Measles TGACA 3407	AACAATTTAGAGCAGGGATGGTGTATTGACAGGAAGAAAGAAATGTCCTCAT
Rinderpest TGATA 3385	AGCAGTTAGATCTGGGATGGTGTCTAACAGGCTAAAGAGAAATTATCTCAT
Phocine_distemper_north_sea AGACC 3407	AGCAGTTAGAGCAGGGTATCAGACTGTTGTCTAGGGAAAGAGACGTGATCCACTCAT
Phocine_distemper_caspian_sea, CGATC 3385	AACAATTAGGGCAGGTATCAGACTGTTGTCTAGGGAAAGGGGATGATCCGCTCAT
Dog_canine_distemper CGATC 3385	AGCAATTAGGGCAGGTATCAGACTGTTGTCTAGGGAAAGGGGATGATCAGCTCAT
Ferret, CGATC 3385	AGCAATTAGGGCAGGTATCAGACTGTTGTCTAGGGAAAGGGGATGATCCGCTCAT
Porcine TGATC 3385	ACCAATTCAAGGCTGGTATGAGATTGTTATGGTAAAGGAGTCAATTGTTAAT

Phyllostomus
AGATC 3385

ACCAAGTTCAAGACCAGGAATGAGACTGTTTATGGGCAAGGGCACAAACCTCTTGAT

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Hendra	
TCTTG	3775
Nipah	
ATTAG	3775
Niniventer	
GCTGA	3484
Berylmys	
ACTTG	3448
Gierle	
CCTTG	3472
Feline	
CCTAA	3515
Dolphin	
ACTCG	3445
Saiga_antelope,	
GTTGG	3445
Goitered_gazelle,	
GTTGG	3445
Domestic_sheep,	
GTTGG	3445
Wild_goat,	
GTTGG	3445
Bharal,	
GTTGG	3445
Domestic_goat,	
GTTGG	3445
Measles	
ACTAG	3467
Rinderpest	
GCTCG	3445
Phocine_distemper	
ATTAG	3467
Phocine_distemper	
GCTGG	3445
Dog_canine_distemper	
GCTGG	3445
Ferret,	
GCTGG	3445
Porcine	
TTTGG	3445
Phyllostomus	
ATTAG	3445

CTAAAACATGTTCAGTGGATTGGCAAGGCTCTCGTGTATATGTGGAGAGA
CAAATACTTGCTCAGTTGACTTGGCACGAGCATTGAGATCTCACATGTGGAGGG
TTGAGGCATGTTCTCTGCTCAAGCAATAAGAAAACATATGTGGGCAAA
TTTCAGTTGTTCTGTATCACTAGCTCAGGCACTCAGAAAACATATGTGGAGTGC
CAGAAGTTGCTCTGTTCCCTGCACAGGCTTAAGGAAACACATGTGGAACCA
TTGATTCTGCTCTGTATTCTAGCTAAGACCATCCGGAAGAGAATGTGGGTTCA
GGGAGTCTGCTCAGTCCAGCTGGCCCGAGCCCTCAGAAGTCACATGTGGCGAA
AGGACTCGTGCTCGGTGCAGCTCGCTAGCTCTGAGGGGCCACATGTGGGCTAA
AGGACTCGTGCTCGGTGCAGCTCGCTAGCTCTGAGGGGCCACATGTGGGCTAA
AGGACTCGTGCTCGGTGCAGCTCGCTAGCTCTGAGGGGCCACATGTGGGCTAG
AGGACTCGTGCTCGGTGCAGCTCGCTAGCTCTGAGGGGCCACATGTGGGCTAG
AGGATTCGTGCTCGGTGCAGCTCGCTAGCTCTGAGGGGCCACATGTGGGCTAG
AGGACTCGTGCTCGGTGCAGCTCGCTAGCTCTGAGGGGCCACATGTGGGCTAG
AAGAGTCATGTTCAGTGCAGCTGGCTAGAGCCCTAAGAAGCCATATGTGGCAAG
GAGACTCATGCTCAGTCCAGCTGGCTAGGCTCTGAGAAGCCACATGTGGGCCAG
AAGACTCATGCTCTGTACAACTAGCAAGAGCATTGAGGAATCATATGTGGGCTAA
AAGACTCATGTTCCGTCCAGCTAGCGAGAGCATTAGGAACCACATGTGGGCCAA
AAGACTCATGTTCCGTCCAGTTAGCGAGAGCATTAGGAACCACATGTGGGCCAA
AAGACTCATGTTCCGTCCAGTTAGCGAGAGCATTAGGAACCACATGTGGGCCAA
AGGATTCATGTTCCGTCCAGCTCGCCCGAGCACTTAGAAATCACATGTGGCAAC
AGGACTCATGTTCAGTCCAGCTGCAAGAGCTCTGCGGAATCACATGTGGGCAGC

★★★★★ ★★★★★ ★★★★★ ★★★★★

Hendra	
TGGAA	3835
Nipah	
GGGAA	3835
Niniventer	
AGGGG	3544
Berylmys	
AGGTG	3508
Gierle	
AGGCT	3532
Feline	
AAACA	3575
Dolphin	
AGGGT	3505
Saiga_antelope,	
CGGCT	3505
Goitered_gazelle,	
CGGCT	3505

CTCTTGGTCGATCAATCTATGGACTTGAAGTGCCTGACGCTTGGAAAGCAATGAC
CGTTAGGTAGAGTAATATACGGCTTGAGGTACCAAGATGCACTTGAGGCTATGGT
CAAGAGGCCGACCGATTATGGCTTGGAAAGTCCCGGATATCCTAGAATGTCTTAA
CAAGAGGCAGACCTATATATGGATTAGAGGTTCCAGATGTGTTAGAATGTTAAA
CAAAAGGCCGGCCTATATATGGCCTTGAGGTCCCTGATGTGATTGAGTGCCTAAC
CTAAAGGAAGGGAGATTATGGGTTAGAAGTACCTGACATTTGGAATGTATGCA
CAAGAGGAAGGTCGATATACGGACTTGAAGGTTCTGTTGACTAGAATCAATGAA
CTCGCGGGAGACCAATCTATGGGTTGGAGGTGCCTGATGTATTAGAATCGATGAA
CTCGCGGGAGACCAATCTATGGGTTGGAGGTGCCTGATGTATTAGAATCGATGAA

Domestic_sheep,	CTCGCGGGAGACCAATCTATGGGTTGGAGGTGCCGATATATTGGAATCGATGAA
CGGCT 3505	
Wild_goat,	CTCGCGGGAGACCAATCTATGGCTTGGAGGTGCCGATATATTAGAATCTATGAA
CGGCT 3505	
Bharal,	CTCGCGGGAGACCAATCTATGGGTTGGAGGTGCCGATATATTAGAATCGATGAA
CGGCT 3505	
Domestic_goat,	CTCGCGGGAGACCAATCTATGGGTTGGAGGTGCCGATATATTAGAATCGATGAA
CGGCT 3505	
Measles	CTCGAGGACGGCCTATTTACGGCCTTGAGGTCCCTGATGTACTAGAAATCTATGCG
AGGCC 3527	
Rinderpest	CCCGAGGAAGGCCCATATATGGCTTAGAGGTGCCGGACGTGCTAGAAATCAATGAG
AGGCC 3505	
Phocine_distemper_north_sea	CTAAGGGTAGACCTATTTATGGCTAGAAGTGCCGGACATACTAGAGTCTATGAG
AGGAT 3527	
Phocine_distemper_caspian_sea,	CGAAGGGTCGTCTATTTATGGCTAGAAGTCCC GGATATCCTGAATCAATGAA
GGGTT 3505	
Dog_canine_distemper	CGAAGGGTCGTCTATTTATGGCTAGAAGTCCC GGATATCCTGAATCAATGAA
GGGTT 3505	
Ferret,	CGAAGGGTCGTCTATTTATGGCTAGAAGTCCC GGATATCCTGAATCAATGAA
GGGTT 3505	
Porcine	CCAAAGGAAGACCAATATACGGATTAGAAGTGCCTGATATCTTGAATCAATGAA
GGGCC 3505	
Phyllostomus	CCCGAGGACGACCAATCTATGGATTAGAAGTACCTGATATCCTAGAATCAATGAG
AGGTC 3505	

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Hendra	GATATATTACAGGGAGTATGGAATGCCAACCTTGTGATCAAGGAATACTATGTA
CGGTT 3895	
Nipah	GGTATATAACAGGGAGCTTAGAGTGCCAAATTGTGAGCAGGGAAACACGATGTA
TGGGT 3895	
Niniventer	TTATAATAACAGGGCATGAGCAATGTAGAATGTGTCAAATGGACTACCTACTA
TGGTT 3604	
Berylmys	TTATCATTAAAGGTCATAGTAACTGTATCATGTGAACAAGGTTCCGATCACTA
TGGTT 3568	
Gierle	ATGTAATAGAGGGTCATACAAATTGTCTGGCATGTGAGGGGTTCTGAGTATTA
TGGAT 3592	
Feline	ATATTATTGTTGATCACGAAGATTGTTACTCATGTATTCAAGGATCAAGATATTA
TACAT 3635	
Dolphin	ACATTATTAAACGTATGAGTCTGTTCATATGTGAAACTGGCTCACTGAATTA
TGGTT 3565	
Saiga_antelope,	ACCTTATTAAACGCCACGAGTCGTGTCTATCTGTGAAACGGGCTCAAGTCACTA
CGGAT 3565	
Goitered_gazelle,	ACCTTATTAAACGCCACGAGTCGTGTCTATCTGTGAAACGGGCTCAAGTCACTA
CGGAT 3565	
Domestic_sheep,	ACCTTATCAAACGCCACGAGTCTTGTCTATCTGTGAGACGGGCTCAAGTCACTA
CGGAT 3565	
Wild_goat,	ACCTTATCAAACGCCACGAGTCTTGTCTATCTGTGAAACGGGCTCAAGTCACTA
CGGAT 3565	
Bharal,	ACCTTATCAAACGCCACGAGTCTTGTCTATCTGTGAAACGGGCTCAAGTCACTA
CGGAT 3565	
Domestic_goat,	ACCTTATCAAACGCCACGAGTCTTGTCTATCTGTGAAACGGGCTCAAGTCACTA
CGGAT 3565	
Measles	ACCTTATTGCGGTATGAGACATGTGTATCTGCGAGTGTGGATCAGTCAACTA
CGGAT 3587	
Rinderpest	ACCTGATCAAACGCCATGCAACCTGCATCTATGTGACTTGGTTCTCAATTAA
TGGTT 3565	
Phocine_distemper_north_sea	ATATGATTAGGAGGCATGAGTCCTGTTCAATGTGTTCAGCTGGTTCTCAATTAA
CGGTT 3587	
Phocine_distemper_caspian_sea,	ATATGATCAGAAGACATGAATCCTGTTGCTTGTGATCAGGCTCTCATAACTA
TGGTT 3565	
Dog_canine_distemper	ATATGATTAGAAGACATGAATCCTGTTGCTTGTGATCAGGCTCTCATAACTA
TGGTT 3565	
Ferret,	ATATGATCAGAAGACATGAATCCTGTTGCTTGTGATCAGGCTCTCATAACTA
TGGTT 3565	
Porcine	AATTAATCATGAGGCATGAGTCATGTAACCTATGTATTCAAGGGATCGCAAATTAA
CGGAT 3565	
Phyllostomus	AGTTGATTATGAGGCATGAATCTGCCATATGTGTATGCAGGGTCACAAAATTAA

TGGAT 3565

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Hendra 3955 GGTTTTCTGTGCCACGAGATTACAATTAGACCAAGTGAATAAAGAGCACTCATC
 CATTA 3955 GGTTCTTGTACCTAGGGATTCCAATTGGATCAGGTAGATAGAGAGCACTCATC
 Nipah 3955 GGTTCTTGTCCCCTCAAATTGCCAGTTAGATAGTATAACTATGTCTACTAATGC
 AATAA 3955 GTAA 3664 GGTTTTTATACCAGCTCAATGTCAACTCGATCAAATTACCAATGAGACGAAC
 Niniventer 3664 Berylmys 3628 GGTTTTTGTACCTCAAATTGTCAACTCGATCAAATAAGTCAACAAATT
 GTTAA 3664 TCTCA 3628 GGTTCTTGTCCGTCAAACGTGAATTAGACCAATCACTGCCCAACAAATT
 Berylmys 3628 TCTAA 3652 GGTTTTTGTACCTCAAATTGTCAACTCGATCAAATAAGTCAACAAATT
 TCTCA 3628 Gierle 3652 GGTTTTTGTACCTCAAATTGTCAACTCGATCAAATAAGTCAACAAATT
 Feline 3695 TCTCC 3695 GGTTCTTGGTCCCAGCAATTGCCAATTAGATAATATTCCAAGGAGACATCATC
 Dolphin 3695 TTTAC 3625 GGTTTTCTGTCCCCTGCAGGGTGCCAGCTTGACGATGTATCTAGAGAGACTCGGC
 Saiga_antelope, 3625 TCTTC 3625 GGTTTTCTGTCCCCTGCAGGGTGCCAGCTTGACGATGTATCTAGAGAGACTCGGC
 Goitered_gazelle, 3625 TCTTC 3625 GGTTTTCTGTCCCCTGCAGGGTGCCAGCTTGACGATGTATCTAGAGAGACTCGGC
 Domestic_sheep, 3625 TCTTC 3625 GGTTTTTGTACCTGCAGGGTGCCAGCTTGACGATGTATCTAGAGAGACTCGGC
 Wild_goat, 3625 TCTCC 3625 GGTTTTTGTACCTGCAGGGTGCCAGCTTGACGATGTATCTAGAGAGACTCGGC
 Bharal, 3625 TCTTC 3625 GGTTTTCTGTCCCCTGCAGGGTGCCAGCTTGACGATATATCTAGAGAGACTCGGC
 Domestic_goat, 3625 TCTTC 3625 GGTTTTCTGTCCCCTGCAGGGTGCCAGCTTGACGATGTATCTAGAGAGACTCGGC
 Measles 3647 CTTGA 3647 GGTTTTTGTACCATCGAACTGTCACTGGATGACATAGATAGAGAGACGT
 Rinderpest 3625 ACTCA 3625 GGTTCTTGTACCAATTGTCACTGGATAGTATTACAGAGGAACATCTGC
 Phocine_distemper_north_sea 3647 ATAA 3647 GGTTTTTGTACCGAGCAATTGCCAATTGGATAGTATTACAGAGGAACATCTGC
 Phocine_distemper_caspian_sea, 3625 ACTGA 3625 GGTTTTTGTACCGAGCAATTGCCAATTGGATAGTATTACAGAGGAACATCTGC
 Dog_canine_distemper 3625 ACTGA 3625 GGTTTTTATACCAGCGAATTGCCAATTGGATAGTATTACAGAGGAACATCTGC
 Ferret, 3625 ACTGA 3625 GGTTTTTATACCAGCGAATTGCCAATTGGATAGTATTACAGAGGAACATCTGC
 Porcine 3625 CCTTA 3625 GGTTTTTGTGCCATCAAATTGCCAACTCGATAACATTACATCAGGCACATCTAG
 Phyllostomus 3625 CCTCA 3625 GGTTCTTGTCCCAGCAAACGTCACTGGATAGACAACATCACTGCTAGTACCTCTAG

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Hendra 4015 GAGTACCTTACGTGGCTCAAGCACTGATGAGAGGTCAAGATATCAAACCTAGGAAA
 CGTCA 4015 Nipah 4015 GAGTACCTTATGTAGGATCAAGTACGGATGAAAGATCGGATATCAAACCTAGGAA
 Nipah 4015 TGTCA 4015 GAGTCCCCTATATTGGATCAACCACAGAAGAAAGAACAGATATGAAGTTGTCA
 Niniventer 4015 TGTCA 3724 GAGTACCATATATAGGGTCAACTACAGATGAAAGATCGGATATGAAATTATCCTA
 TGTCA 3724 Berylmys 3688 GGGTCCCCTACATTGGCTCTACGACAGATGAGAGATCAGACATGAAGTTATCTTA
 Berylmys 3688 TGTCA 3688 GAGTACCTTATGTGGATCAACAACACTGAAGAAAGGAGTGATATGAAGTTGTCA
 TGTCA 3688 GAGTACCTTATGTGGTCAACAACAGAGGAAAGGACAGACATGAAATTAGCATT
 TGTCA 3688 GAGTCCCCTATATTGGGTCAACAACAGAGGAAAGGACAGACATGAAACTTGCATT
 Gierle 3712 GAGTACCTTATGTGGATCAACAACACTGAAGAAAGGAGTGATATGAAGTTGTCA
 TGTCA 3712 Feline 3755 GAGTACCTTATGTGGTCAACAACAGAGGAAAGGACAGACATGAAACTTGCATT
 Feline 3755 TGTGA 3755 GAGTACCTTATGTGGTCAACAACAGAGGAAAGGACAGACATGAAACTTGCATT
 Dolphin 3685 TGCCTA 3685 GTGTACCTTATGTGGATCAACAACACTGAAGAAAGGACAGACATGAAACTTGCATT
 Saiga_antelope, 3685 TGTCA 3685 GTGTACCTTATGTGGATCAACAACACTGAAGAAAGGACAGACATGAAACTTGCATT
 Goitered_gazelle, 3685 TGTCA 3685 GTGTACCTTATGTGGATCAACAACACTGAAGAAAGGACAGACATGAAACTTGCATT
 Domestic_sheep, 3685 TGTCA 3685 GTGTACCTTATGTGGATCAACAACACTGAAGAAAGGACAGACATGAAACTTGCATT

TGTTA	3685	GTGTACCTTATGTCGGATCAACAACGTGAGGAGAGGACAGACATGAAACTTGCTT
Wild_goat,		GTGTACCTTATGTCGGATCAACAACGTGAGGAAAGGACAGACATGAAACTTGCTT
TGTTA	3685	GTGTACCTTATGTCGGATCAACAACGTGAGGAAAGGACAGACATGAAACTTGCTT
Bharal,		GTGTACCTTATGTCGGATCAACAACGTGAGGAAAGGACAGACATGAAACTTGCTT
TGTTA	3685	GTGTACCTTATGTCGGATCAACAACGTGAGGAAAGGACAGACATGAAACTTGCTT
Domestic_goat,		GTGTACCTTATGTCGGATCAACAACGTGAGGAAAGGACAGACATGAAACTTGCTT
TGTTA	3685	GAGTCCCATAATTGGTTCTACCACTGATGAGAGAACAGACATGAAGCTCGCCTT
Measles		GGGTCCCATACTGGGTCTACAACTGAAGAGAACGGATATGAAGCTCGCATT
CGTAA	3707	GGGTGCCATACTGGGTCCACAACAGAACAGAGACTGATATGAAGCTCGCATT
Rinderpest		GGGTGCCATACTGGGTCCACAACAGAACAGACATGAAACTAGCATT
TGTTA	3685	GGGTGCCATACTAGGGTCCACAACAGAACAGACATGAAACTAGCATT
Phocine_distemper_north_sea		GGGTGCCATACTAGGGTCCACAACAGAACAGACATGAAACTAGCATT
TGTGA	3707	GGGTGCCATACTAGGGTCCACAACAGAACAGACATGAAACTAGCATT
Phocine_distemper_caspian_sea,		GGGTGCCATACTAGGGTCCACAACAGAACAGACATGAAACTAGCATT
CGTCA	3685	GGGTGCCATACTAGGGTCCACAACAGAACAGACATGAAACTAGCATT
Dog_canine_distemper		GGGTGCCATACTAGGGTCCACAACAGAACAGACATGAAACTAGCATT
CGTCA	3685	GGGTGCCATACTAGGGTCCACAACAGAACAGACATGAAACTAGCATT
Ferret,		GGGTGCCATACTAGGGTCCACAACAGAACAGACATGAAACTAGCATT
CGTCA	3685	GGGTCCATACTATCGGATCTACCACAGAGGAGAACGGATATGAAGCTGTCATT
Porcine		GAGTTCCATACTCGGATCCACGACAGAACAGAACCGATATGAAACTTCGTT
TGTCA	3685	

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Hendra		AGAGACCGACAAGAGCACTGAGATCTGCATCCGAATTGCAACTGTTTACCTG
GGCAT	4075	AAAGACCAACTAAGGCCTTGCCTCTGCTATCAGAATTGCGACAGTATATACTTG
Nipah		AATCTCCTAGTCGACCACTTAAAGCCGCTGTCGGATTGCAACAGTTTACATG
GGCCT	4075	GGTCACCTAGTCGCTCTCAAAGCTGCAGTTAGGTTAGCAACAGTCTACATG
Niniventer		GATCCCCAAGTCGACCGCTTAAGGCTGCAGTGCACATTGCTACTGTACACCTG
GGCTT	3784	GGTCACCTAGTCGGCCACTTAAAGCAGCAGTTGAATTGCAAGCAGTATACATG
Berylmys		AGTCCCCTAGTCGCTCCCTCAAATCTGCCGTGAGAATTGCTACAGTGTACTCTTG
GGCCT	3748	GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
Gierle		GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
GGCAT	3772	GGTCTCCAAGTCGATCCCTCAAATCAGCAGTCAGTCAGTATACATG
Feline		GGGCTCCAAGTCGATCCCTAAATCAGCAGTCAGTCAGTATACATG
GGCTT	3815	GATCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
Dolphin		GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
GGCTT	3745	GGTCTCCAAGTCGATCCCTCAAATCAGCAGTCAGTCAGTATACATG
Saiga_antelope,		GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
GGCTT	3745	GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
Goitered_gazelle,		GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
GGCTT	3745	GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
Domestic_sheep,		GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
GGCCT	3745	GGGCTCCAAGTCGATCCCTAAATCAGCAGTCAGTCAGTATACATG
Wild_goat,		GATCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
GGCCT	3745	GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
Bharal,		GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
GGCCT	3745	GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
Domestic_goat,		GGTCTCCAAGTAGATCCCTCAAATCAGCAGTTAGAATTGCAACAGTTACTCATG
GGCCT	3745	GAGCCCCAAGTAGATCCCTAAATCAGCAGTTAGGATAGCCACTGTCTACTCTTG
Measles		AGTCACCCAGTCGAACCTGCGATCTGCCGTTAGAATTGCAACAGTTACTCATG
GGCTT	3767	AGTCTCCAAGCAGATCCCTAAATCAGCAGTTAGGATAGCCACTGTCTACTCTTG
Rinderpest		AATCTCCTAGTAGGTCTCTGAAATCAGCAGTGAGAACAGAACAGTTACTCATG
GGCAT	3745	AATCTCCTAGTAGGTCTCTAAAATCAGCAGTGAGAACAGAACAGTTACTCATG
Phocine_distemper_north_sea		AATCTCCTAGTAGGTCTCTAAAATCAGCAGTGAGAACAGAACAGTTACTCATG
GGCTT	3767	AATCTCCTAGTAGGTCTCTAAAATCAGCAGTGAGAACAGAACAGTTACTCATG
Phocine_distemper_caspian_sea,		AATCTCCTAGTAGGTCTCTAAAATCAGCAGTGAGAACAGAACAGTTACTCATG
GGCCT	3745	AATCTCCTAGTAGGTCTCTAAAATCAGCAGTGAGAACAGAACAGTTACTCATG
Dog_canine_distemper		AATCTCCTAGTAGGTCTCTAAAATCAGCAGTGAGAACAGAACAGTTACTCATG
GGCCT	3745	AATCTCCTAGTAGGTCTCTAAAATCAGCAGTGAGAACAGAACAGTTACTCATG
Ferret,		AGTCACCCAGCCGATCACTAAATCAGCAGTGAGAACAGAACAGTTACTCATG
GGCCT	3745	AGTCACCCAGCCGATCACTAAATCAGCAGTGAGAACAGAACAGTTACTCATG
Porcine		AATCACCAAGTCGGTCTCTTAAGTCAGCAGTGAGAACAGAACAGTTACTCATG
GGCCT	3745	AATCACCAAGTCGGTCTCTTAAGTCAGCAGTGAGAACAGAACAGTTACTCATG
Phyllostomus		AATCACCAAGTCGGTCTCTTAAGTCAGCAGTGAGAACAGAACAGTTACTCATG
GGCAT	3745	

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Hendra		ACGGAGATTCTGAAGAAAGTTGGTATGAGGCTTGGTACTTGGCTTCCCAGAGGGT
CAACA	4135	ATGGGGACAATGAAGAGTGTGGTATGAAGCTTGGTACCTAGCGTCTCAGAGGGT
Nipah		TTGGAGACGATGACCAGTCATGGCAGGAAGCATGGGAGATTGCTAAGCAGAGGC
AAACA	4135	TTGGTGATGACGATGAAACCTGGCAACAAGCTGGTACTTGCTAGACAAAGGGC
Niniventer		TCGGTGACGATGACCAGTCGTGGCAGGAAGCATGGCATCTCGCAAGTCAAAGAGC
TAATA	3844	ATGGTGATGATAATTGTCTTGGCATGAAGCTTGGTATTAGCAAGGACTAGAGC
Berylmys		ATGGTGATGACGACCAGTCATGGCATGAGGCATGGACTCTAGCGAGGCAGAGGC
TAATG	3808	ACGGGGATGATGAGAAATCATGGAGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Gierle		ACGGGGATGATGAGAAATCATGGAGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
TAATA	3832	ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Feline		ACGGGGATGATGAGAAATCATGGAGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
AAATA	3875	ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Dolphin		ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
TAACA	3805	ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Saiga_antelope,		ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
CAATA	3805	ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Goitered_gazelle,		ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
CAATA	3805	ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Domestic_sheep,		ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
CAACA	3805	ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Wild_goat,		ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
CAACA	3805	ACGGGGATGATGAGAAATCATGGGGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Bharal,		ACGGGGATGATGAGAAAGTCATGGAGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
CAATA	3805	ACGGGGATGATGAGAAATCATGGAGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Domestic_goat,		ACGGGGATGATGAGAAATCATGGAGTGAAGCCTGGATGCTAGCTAGGCAGAGAGC
CAATA	3805	ACGGGTGATGATGATACTCTTGGAACGAAGCCTGGATGCTAGCTAGGCAGAGAGC
Measles		ACGGAGATGACGACAAATCATGGAATGAAGCTTAAACTAGCACAGCAGAGGGC
CAATG	3827	ATGGTGATGATGAGAAATCATGGCAAGAAGCGTGGACTCTGGCAAGGCAAAGGGC
Rinderpest		ACGGAGATGACGACAAATCATGGAATGAAGCTTAAACTAGCACAGCAGAGAGC
AAAAG	3805	ATGGTGATGATGAGAAATCATGGCAAGAGGGCTGGACCTTGGCAAAACAGAGAGC
Phocine_distemper_north_sea		ATGGTGATGATGACGAATCTTGGCAAGAGGGCTGGACCTTGGCAAAACAGAGAGC
CAATA	3827	ATGGTGATGATGACGAATCTTGGCAAGAGGGCTGGACCTTGGCAAAACAGAGAGC
Phocine_distemper_caspian_sea,		ATGGTGATGATGACGAATCTTGGCAAGAGGGCTGGACCTTGGCAAAACAGAGAGC
GAACA	3805	ATGGTGATGATGACGAATCTTGGCAAGAGGGCTGGACCTTGGCAAAACAGAGAGC
Dog_canine_distemper		ATGGTGATGATGACGAATCTTGGCAAGAGGGCTGGACCTTGGCAAAACAGAGAGC
GGACA	3805	ATGGTGATGATGACGAATCTTGGCAAGAGGGCTGGACCTTGGCAAAACAGAGAGC
Ferret,		ATGGTGATGATGACGAATCTTGGCAAGAGGGCTGGACCTTGGCAAAACAGAGAGC
GAACA	3805	ACGGGGATGATGAGAAATCTTGGAAATGAGGCATGGCAGCTGGCAAAACAGAGAGC
Porcine		ATGGTGATGATGACAGATCTTGGAAATGAAGCTTGGCACCTAGCTAGGCAGAGAGC
TAATA	3805	ACGGGGATGATGAGAAATCTTGGAAATGAGGCATGGCAGCTGGCAAAACAGAGAGC
Phyllostomus		ACGGGGATGATGAGAAATCTTGGAAATGAAGCTTGGCACCTAGCTAGGCAGAGAGC
CAATA	3805	ACGGGGATGATGAGAAATCTTGGAAATGAAGCTTGGCACCTAGCTAGGCAGAGAGC

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Hendra		TTGATATAGATGTGTTAAAGCTATAACTCCTGTCTCAACTTCCAACAATCTATC
TCACA	4195	TAGACTTAGATGTATTGAAAGCTATAACCCAGTTCCACTTCAAACAATTATC
Nipah		TAACATTAGATGAACCTAAACTTATCACACCCATTCAACATCCACAAATTGGC
CCATA	4195	TATCCTTAAATGACCTTAAACTAATCACCCCTATCTAACATCAACTAATCTGGC
Niniventer		TCACATTGAATGATCTCGATTGATAACACCAATCTACATCTTCAACTTGGC
ACACA	3904	TTACTTTGACGAACCTAAATAACACCTATAGCTACATCTACAAATTAGC
Berylmys		TTACCTTAGAGGAGTTAAGGATGATTACCCAATATCGACATCCACCAATTGGC
ACATA	3868	TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
Gierle		TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
TCACA	3892	TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
Feline		TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
ACATA	3935	TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
Dolphin		TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
TCATC	3865	TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
Saiga_antelope,		TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
CCACC	3865	TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
Goitered_gazelle,		TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
CCACC	3865	TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
Domestic_sheep,		TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC
CCACC	3865	TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCCACATCCACCAACTAGC

Wild_goat,	TCACCTTAGATGAATTGAGAATGATCACTCCAGTCTCATCCACCAACCTAGC
CCACC 3865	
Bharal,	TCACCTTAGATGAATTGAGAATGATAACTCCAGTCTCATCCACCAACCTAGC
CCACC 3865	
Domestic_goat,	TCACCTTAGATGAATTAAGAATGATCACTCCAGTCTCATCCACCAACTTAGC
CCACC 3865	
Measles	TGAGCCTGGAGGAGCTAAGGGTGATCACTCCATCTGACTTCGACTAATTAGC
GCATA 3887	
Rinderpest	TGAGCCTGGAGGAATTAAAAATGATAACTCCAATTCAACATCCACCAACCTAGC
ACATA 3865	
Phocine_distemper_north_sea	TATCTCTGAAGAGCTCAGGATGATTACTCCTATTCTACTTCTACAAATTAGC
TCACC 3887	
Phocine_distemper_caspian_sea,	TCTCACTTGAGGAATTACGGATGATTACCCCAATTCCACTTCTACTAATCTAGC
TCACC 3865	
Dog_canine_distemper	TCTCACTTGAGGAATTACGAATGATTACCCCAATTCCACTTCTACTAATCTAGC
TCACC 3865	
Ferret,	TCTCACTTGAGGAATTACGGATGATTACCCCAATTCCACTTCTACTAATCTAGC
TCACC 3865	
Porcine	TTACACTCGAGGAGCTCAGGATGATTACACCTGTATCAACATCCACGAATCTGGC
CCACA 3865	
Phyllostomus	TCACACTTGAGGAACTTAGAATGATCACACCAATCTCAACCTCTACAAATCTGGC
GCACA 3865	

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Hendra		GAATCAGAGATAGATCTACACAGTTCAAGTGCAGGTAGTGTCTTAATAGGGT
TTCTA	4255	
Nipah		GATTGAGAGATAAATCCACACAATTAAAGTTGCAGGGAGTGTACTCAACAGAGT
TTCTA	4255	
Niniventer		GGCTTCGTGACAAGAGCACTCAAGTTAAGTATTCAAGGAAACATCTTAATACGAGT
TTCTA	3964	
Berylmys		GAATCAAGAGATCGTAGCACACAAGTTAAATACTCAGGGACATCTCTGGTGCAGGGT
TTCCA	3928	
Gierle		GATTAAGAGATCGGAGCACTCAGGTCAAGTATTCAAGGAAACATCTTGCTGCAGGGT
GGCAA	3952	
Feline		GATTGAGAGATAGAAGCACTCAAGTTAAATATTCAAGGAACTTCTTAGTAAGAGT
GGCAC	3995	
Dolphin		GATTGAGGGATCGTAACACTCAGGTAAAGTACTCAGGTACATCGTTAATCCGAGT
AGCGA	3925	
Saiga_antelope,		GGTTGAGGGATCGGAGTACCCAGGTGAAGTACTCGGGGACATCCCTGTGAGGGT
TGCAA	3925	
Goitered_gazelle,		GGTTGAGGGATCGGAGTACCCAGGTGAAGTACTCGGGGACATCCCTGTGAGGGT
TGCAA	3925	
Domestic_sheep,		GGTTGAGGGATCGGAGCACCCAGGTGAAATACTCGGGGACATCCCTGTGAGGGT
TGCAA	3925	
Wild_goat,		GGTTGAGGGATCGGAGCACCCAGGTGAAATACTCGGGGACATCCCTGTGAGGGT
TGCAA	3925	
Bharal,		GGTTGAGGGATCGGAGCACCCAGGTGAAATACTCGGGGACATCCCTGTGAGGGT
TGCAA	3925	
Domestic_goat,		GGTTGAGGGATCGGAGTACCCAGGTGAAATACTCGGGGACATCCCTGTGAGGGT
TGCAA	3925	
Measles		GGTTGAGGGATCGTAGCAACTCAAGTCAAATACTCAGGTACATCCCTGTCCGAGT
GGCAA	3947	
Rinderpest		GAATCAGGGATCGGAGTACCCAAAGTTAAGTACTCTGGGACATCTTGGTCAGAGT
GGCTC	3925	
Phocine_distemper_north_sea		GAATCAAGAGACAAAGCACACAAGTCAAATACTCAGGTACCTCTTATTAGGGT
CGCAC	3947	
Phocine_distemper_caspian_sea,		GAATCAAGAGACAAGAGTACTCAAGTCAAATACTCAGGGACCTCTCATCAGAGT
GGCAC	3925	
Dog_canine_distemper		GAATCAAGAGACAAGAGTACTCAAGTCAAATACTCAGGGACCTCTCATCAGAGT
AGCAC	3925	
Ferret,		GAATCAAGAGACAAGAGTACTCAAGTCAAATACTCAGGGACCTCTCATCAGAGT
AGCAC	3925	
Porcine		GGCTGAGGGATAAGAGCACCCAAAGTCAAGTACTCCGGGACATCATTGATTGAGT
GGCAA	3925	
Phyllostomus		GGTTGCGAGACAAAGTACCCAGGTAAAGTACTCTGGTACATCACTGATTAGAGT
CGCTA	3925	

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Hendra		GATATGTCAACATAAGTAATGATAATTTAGACTTCAGAGTGGAGGTGAAAGGT
CGACA	4315	GATATGTTAACATAAGCAATGACAATCTAGATTCAGAATTGAGGGAGAAAGGT
Nipah		GATATGTTAACATAAGCAATGACAATCTAGATTCAGAATTGAGGGAGAAAGGT
AGATA	4315	GATATGTTAACATAAGCAATGACAATCTAGATTCAGAATTGAGGGAGAAAGGT
Niniventer		GATATGTTAACATAAGCAATGACAATCTAGATTCAGAATTGAGGGAGAAAGGT
GGACA	4024	GATATGTTAACATAAGCAATGACAATCTAGATTCAGAATTGAGGGAGAAAGGT
Berylmys		GGTATGTTAGCATTAGTAATGATCATCTGCTTCAACATTGAGGGAAAGAGT
TGACA	3988	GGTATGTCAGCATCAGTAATGACCATCTGTCATTCTAACATTGAGGGAAAGAGT
Gierle		GGTATGTCAGCATCAGTAATGACCATCTGTCATTCTAACATTGAGGGAAAGAGT
GGATA	4012	GCTATACAACAATCTAACATTGATAATATGTCGTCATTATTAAACAAAAAGT
Feline		GGTATACAACAATATCGAACATTGATAACTTATCATTATAGCAGATAAGAAGGT
CGATA	4055	GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
Dolphin		GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
GGATA	3985	GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
Saiga_antelope,		GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
GGATA	3985	GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
Goitered_gazelle,		GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
GGATA	3985	GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
Domestic_sheep,		GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
GGATA	3985	GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
Wild_goat,		GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
GGATA	3985	GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
Bharal,		GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
GGATA	3985	GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
Domestic_goat,		GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
GGATA	3985	GATACACAACCCTCCAATGATAACTTGTGTTGTGATATCTGAGAAAAAGT
Measles		GGTATACCAACTCTCCAACGACAATCTCTCATTTGTATATCAGATAAGAAGGT
TGATA	4007	GGTATACCAACAATCTCCAACGACAATCTCTCATTTGTATATCAGATAAGAAGGT
Rinderpest		GTTATACAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
AGATA	3985	GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
Phocine_distemper_north_sea		GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
GGACA	4007	GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
Phocine_distemper_caspian_sea,		GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
GGACA	3985	GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
Dog_canine_distemper		GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
GGACA	3985	GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
Ferret,		GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
GGACA	3985	GTTATGCAACATCTGAATGATAATCTCTCATTTGTATGCTGACAAAAAGT
Porcine		GGTATACTACCATTCTAACATGATAATCTCTTTACGATTGCTGAGAAAAAGT
AGACA	3985	GGTACACAACAATCTCTAACGATAATCTCTTTACGATTGCTGAGAAAAAGT
Phyllostomus		GGTACACAACAATCTCTAACGATAATCTCTTTACGATTGCTGAGAAAAAGT
TGACA	3985	GGTACACAACAATCTCTAACGATAATCTCTTTACGATTGCTGAGAAAAAGT

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Hendra		CCAATCTAATATACCAACAAACAATGCTACTCGGCTTGTCACTATTGGAGGTAA
ATTTC	4375	CGAACATCTTATTTATCAACAAGCAATGCTATTAGGGTTATCGGTATTGGAGGTAA
Nipah		CCAACCTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
ATTCA	4375	CAAATTTATATCAACAATGCATGTTATTGGGCTTGCATTCTTGAGCAAAA
Niniventer		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
ATTAA	4084	CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
Berylmys		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
ATTCA	4048	CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
Gierle		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
ATATC	4072	CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
Feline		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
ATTCA	4115	CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
Dolphin		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
TTTCA	4045	CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
Saiga_antelope,		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
CTTTA	4045	CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
Goitered_gazelle,		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
CTTTA	4045	CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
Domestic_sheep,		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
CTTTA	4045	CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA
Wild_goat,		CAAATTTATATCAACAATGTATGTTACTCGGGTTATCAATCCTCGAGGAGCA

CTTTA	4045	CCAACTTCATTATCAGCAAGGGATGTTGCTTGGTCTTGGGATCCTTGAGAACCT
Bharal,		
CTTTA	4045	CCAACTTCATTATCAGCAAGGGATGCTCGGTCTTGGGATCCTTGAGAACCT
Domestic_goat,		
CTTTA	4045	CTAACTTATATACCAACAAGGAATGTTCTAGGGTTGGGTGTTTAGAACATT
Measles		
GTTC	4067	CAAACCTCATCTATCAGCAGGGATGTTACTAGGTTGGGTGTCCTCGAGACATT
Rinderpest		
GTTTA	4045	CAAACTTCATCTATCAGCAAGGTATGCTCTGGTCTTGGCATCTAGAACATCA
Phocine_distemper_north_sea		
TTTCA	4067	CAAATTTATTTATCAACAAGGTATGCTCTGGCCTGGGATCCTTGAGCAGCTT
Phocine_distemper_caspian_sea,		
ATTTA	4045	CAAATTTATTTATCAACAAGGTATGCTCTGGCCTGGGATCCTTGAGCAGCTT
Dog_canine_distemper		
ATTTA	4045	CAAATTTATTTATCAACAAGGTATGCTCTGGCCTGGGATCCTTGAGCAGCTT
Ferret,		
ATTTA	4045	CAAATTTATTTATCAACAAGGTATGCTCTGGCCTGGGATCCTTGAGCAGCTT
Porcine		
ATTTC	4045	CCAACTTATATATCAACAAGGGATGTTCTCGGCTAGGGATCCTCGAGCACCT
Phyllostomus		
CTTCA	4045	CCAATTTCATATATCAGCAGGGATGCTGTAGGGCTAGGGGTGTTGAAACAACT

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Hendra		GGTTGAGAACAGAACAGATGATTATAACGGAATATATCATCTGCATGTCAGAGA
TAATT	4435	GATTGAGATTAGAAACTGATGATTACAACGGGATATATCACTACACGTAAGGA
Nipah		GAAATGTATCCACAACAGGTCTTCTCAATACTGTTCTCATCTCATGCAGATGT
TAATT	4435	GATGCAAAGCTACCACTGGTTAGGTAACTCATTACATCTCATGCAGACAC
Niniventer		GGCGGTGGAGCACTACAGGGTTAACAACTTACTCCATCTCATGCCGATGTT
TAATT	4144	GATACTGTACAAGTACTGGACAGTCAAACACTGTAATTCACTTACATGCAGATGT
Berylmys		GGTTACAGACAAATACGGGTCTCTAATACAGTGTACATCTACATGTTGAAGC
CAATT	4108	GGCTAGAGGCCACCACCGGAGTATCCAACACAGTGCTACACCTGCACGTGAAAC
Gierle		GGCTAGAGGCCACCACCGGAGTATCCAACACAGTGCTACACCTGCACGTGAAAC
TCATT	4132	GGCTAGAGGCCACCACCGGAGTATCCAACACAGTGCTACACCTGCACGTGAAAC
Feline		GGCTAGAGGCCACCACCGGAGTATCCAACACAGTGCTACACCTGCACGTGAAAC
TAATT	4175	GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
Dolphin		GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
AGAAT	4105	GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
Saiga_antelope,		GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
AGAAT	4105	GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
Goitered_gazelle,		GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
AGAAT	4105	GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
Domestic_sheep,		GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
AGAAT	4105	GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
Wild_goat,		GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
AGAAT	4105	GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
Bharal,		GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
AGAAT	4105	GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
Domestic_goat,		GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
AGAAT	4105	GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
Measles		GGCTAGAGGCCACCACCGGAGTATCTAACACAGTGCTACACCTGCACGTGAAAC
AGATT	4127	GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
Rinderpest		GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
AGATT	4105	GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
Phocine_distemper_north_sea		GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
AGACT	4127	GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
Phocine_distemper_caspian_sea,		GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
AGATT	4105	GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
Dog_canine_distemper		GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
AGATT	4105	GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
Ferret,		GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
AGATT	4105	GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
Porcine		GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
TGAGT	4105	GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
Phyllostomus		GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC
CGAAT	4105	GGCTTGATAAAAGACACAGGACCTCAAACACTGTACTGCACCTCCATGTAGAAC

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Hendra		GTTGTGTCAAGGAGGTTGCTGATATTGGTGGTTAATGCTGAGCTACCTGTCCC
AGAAT	4495	GTTGTGTCAAAGAAGTGGCTGATGTAGGCCAAGTAGACGCTGAGTTGCCTATCCC
Nipah		GTTGTATTACTCCTATGGAAGATCAACCTTACATCAAGAGCCTCGTTCAATTCC
AGAAT	4495	GCTGTATCATTGAATGGAAGATCAACCATTACGGGCATGTAGACCTCTTCC
Niniventer		GCTGCATAAACAGATGGAGGACCAGCCATTATTAGGCCATTATGATCTGCC
AGAAA	4204	GTTGTATAGTACAGATGACTGATCAGCCTTACACCAAGCTAACAAAAAGCT
Berylmys		GCTGTGTAATCCCTATGACTGACCATCCCAGTCACCGTACTGCACC
TGTAA	4168	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Gierle		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
ACAAA	4192	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Feline		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
ACCTG	4235	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Dolphin		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
TAGCG	4165	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Saiga_antelope,		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
AGTTA	4165	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Goitered_gazelle,		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
AGTTA	4165	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Domestic_sheep,		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
AGTTA	4165	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Wild_goat,		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
AGTTA	4165	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Bharal,		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
AGTTA	4165	GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
Domestic_goat,		GTTGTGTTGTACCTATGGTGGATCACCAAGGATAACCGAGTCTCCGTAATATAAA
AGTTA	4165	GTTGCGTGTACCCGATGATAGATCATCCCAGGATAACCCAGCTCCCGCAAGCTAGA
Measles		GCTGCGTGTACCCGATGATAGATCATCCCAGGATAACCCAGCTCCCGCAAGCTAGA
GCTGA	4187	GTTGTGTGATCCCCATGACTGATCATCCACGAGTCCTAGCCCTTAGACAGGTTGT
Rinderpest		GTTGCGTAATAACCCATGAGTGACCATCCAAGAGTCCCAGGGCTCAGAAAGGTGCT
GTTCA	4165	GTTGCGTAATAACCCATGAGTGACCATCCAAGAGTCCCAGGGCTCAGAAAGGTGCT
Phocine_distemper_north_sea		GTTGCGTAATAACCCATGAGTGACCATCCAAGAGTCCCAGGGCTCAGAAAGGTGCT
TGTAC	4187	GTTGCGTAATAACCCATGAGTGACCATCCAAGAGTCCCAGGGCTCAGAAAGGTGCT
Phocine_distemper_caspian_sea,		GCTGTGTACCCGACTATCGAGTGTACCAAGTCTCCGCCAACTTCG
CATAC	4165	GTTGTGTAATCCCTATGACTGATCACCGACTGTCCCTAGTATCCACCAAATGAG
Dog_canine_distemper		*****
CATAC	4165	*****
Ferret,		
CATAC	4165	
Porcine		
GCAGT	4165	
Phyllostomus		
GAAAC	4165	

Hendra		ACACTGAAGTAGAAAATAATAGGCTCATATATGACCCAGATCCTGTTCTGAAAT
TGATT	4555	ATACTGAAGTGGATAACAATCATCTTATATGATCCAGACCCGTTTCAGAAAT
Nipah		CTAAGAGAATTATTAATAACAGATTAATCTATGATCCTAACCAATAATAGAAA
AGATT	4555	TTAGAGTATGTGCCAATAATAGATTGATTTGATAGTAACCCGTGATAGAGCG
Niniventer		TCCAGACATGCCGTCAAATCGCTAATTATGACCACAATCCTGTCATGACAA
AGAAG	4264	ATATTAGGCCATTAATAATAACTGATATATGATCCGGCTCTATAATCGATAC
Berylmys		CCAGGAAAATGTGCACCAATCCATTGATCTACGATAATTCTCAATCATTGAGAA
AGATC	4228	CGGATGAGCTATGCACAAACCTTGTACGACAGGTCCCCCATAGAGCA
Gierle		CGGATGAGCTATGCACAAACCTTGTACGACAGGTCCCCCATAGAGCA
GGACT	4252	CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
Feline		CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
CGATG	4295	CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
Dolphin		CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
GGATG	4225	CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
Saiga_antelope,		CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
CGATG	4225	CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
Goitered_gazelle,		CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
CGATG	4225	CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
Domestic_sheep,		CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
CGATG	4225	CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
Wild_goat,		CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA
CGATG	4225	CGGATGAGCTATGCACAAACCTTGTACGACAGGTCTCCCATAGAGCA

Bharal,
CGATG 4225
Domestic_goat,
CGATG 4225
Measles
AGATG 4247
Rinderpest
GGAAG 4225
Phocine_distemper_north_sea
AGATG 4247
Phocine_distemper_caspian_sea,
AGATG 4225
Dog_canine_distemper
AGATG 4225
Ferret,
AGATG 4225
Porcine
GGATG 4225
Phyllostomus
GGATG 4225

CGGATGAGCTATGCACAAACCCTTGATCTACGACAGGTCTCCATCATAGAGCA
CGGATGAGCTATGCACAAACCCTTGATCTACGACAGGTCTCCATCATAGAGCA
GGGCAGAGCTATGTACCAACCCATTGATATGATAATGCACCTTAATTGACAG
GAAGGGAGCTATGTACCAACCCACTGATTTATGATAGTGCACCCATCATGACAG
CAAGGAATATCTGCACAAATCCCTGATTTATGATAGTAACCCTATTATAGAGAA
CAAGAAATATCTGTACAAATCCTTGATTTATGACAGTAACCCTATTATGAGAA
CAAGAAATATTTGTACAAATCCTTGATTTATGACAGTAACCCTATTATGAGAA
CAAGAAATGTTGTACAAACCCCTGATCTATGATAAGACCCCTATAATTGAAAA
CCCAACAGTTGTACAAACCCCTGATCTATGATAAGACCCCTATAATTGAAAA
CTCATACCATATGTACGAATCCCCTATTTATGATAACAACCCTATTATGAAAA

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Hendra
GTCCA 4615
Nipah
GTCAA 4615
Niniventer
GGATA 4324
Berylmys
GGACA 4288
Gierle
GGAAA 4312
Feline
GTCAA 4355
Dolphin
GTCAA 4285
Saiga_antelope,
GTCAA 4285
Goitered_gazelle,
GTCAA 4285
Domestic_sheep,
GTCAA 4285
Wild_goat,
GTCAA 4285
Bharal,
GTCCA 4285
Domestic_goat,
GTCAA 4285
Measles
GTCCA 4307
Rinderpest
GTCTA 4285
Phocine_distemper_north_sea
GACAA 4307
Phocine_distemper_caspian_sea,
GACAA 4285
Dog_canine_distemper
GACAA 4285
Ferret,
GACAA 4285
Porcine
GTCCA 4285
Phyllostomus
GTCCA 4285

GTGATCGCTTATCAAAGCAAGAGCTAAGGGAGAGAATTAGACTTCCCTTTG
GCAGCCGTCTTCTAATCAGGAGTCAAATCAAGAGAATTAGACTTCCCTTTATG
CAGCAAGGTTATCTATGCAGTCACATATGAAAGGCCTTGTGATTTGTATCTG
AAATTAAGCTGGTTCAAGACCCTAAACCATTACTTGATTTGTGACTTG
TGATCAGGCTAGGATTCAAGACCCTTAGACCAATCCTAGACTTGTGACCTG
CAGCTAGGCTATATTCCCAAAACCTGTACATTTAATAGATTCCCAAGTTG
CGGTACGTCTATATTCCAGAGCCATAGAACGCCTCGTGGAGTTGTACTTG
CAACCCGGCTATATTCACAGAGCCACAGGAGACATTGGTGGAGTTGTACCTG
CAACCCGGCTATATTCACAGAGCCACAGGAGACATTGGTGGAGTTGTACCTG
CAACCCGACTATACTCACAGAGCCACAGGAGACATTGGTGGAGTTGTACCTG
CAACCCGACTATACTCACAGAGCCACAGGAGACATTGGTGGAGTTGTACCTG
CAACCCGACTATACTCACAGAGCCACAGGAGACATTGGTGGAGTTGTACCTG
CAACCAAGGCTATACACCCAGAGCCATAGGAGGCACCTTGTGGAATTGTACATG
CAACAAAACCTATAACCCAAAGTCATGGAGACATCTCGTGGAAATTGTGACATG
CAATAAGGCTTATAATCAAAGTCATGGAGACATTTGTGACATG
CAGTCAGACTTATAACCAGAGTCACAGAAAGCACATTGTAGAGTTGTACATG
CAGTCAGACTTATAACCAGAGTCACAGAAAGCACATTGTAGAGTTGTACATG
CAATCAGGATTACAATCAACACCACCGGCCAGGTTGTAGAGTTGTACATG
CTATAAGGATCTACCACCAAGCACTATAGACGCCAATTGTAGAGTTGTACATG

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Hendra		CCGAAGAACCTCCATGATGTGTTAGCTAAGACTGTGGCTAAACAGTTCTCGAGAT
CATAA	4675	CTGAGGAACCTCATGATGTCCTAGCTAAGACTGTTGCTCAGACCGTTCTGAGAT
Nipah		CACGAATATTATATCATGCATTATCCAACCTACAGCTGCAACTTTAATAGAGAT
TATAA	4675	CGAACCAATTATATCATGCTTATCTAAATCAACCGCTCCACTCTCATCGAAAT
Niniventer		CAACTGCACTTATCACGCACTATCCAAGTCTACTGCAGCAACATTGATCGAGAT
GATCA	4384	CTACTCAGCTAACACAGTGTGGCGAAAGTGGTGGCGGTATCCATTGTAGAATT
Berylmys		CGGGGCAGCTGTATCACGTACTAGCGAAATCAACTGCTATGTCATGATCGAATT
TATAA	4348	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAATT
Gierle		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAATT
TATCA	4372	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Feline		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAATT
AATTA	4415	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Dolphin		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GGTTA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Saiga_antelope,		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATTA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Goitered_gazelle,		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATTA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Domestic_sheep,		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATCA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Wild_goat,		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATCA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Bharal,		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATCA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Domestic_goat,		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATCA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Measles		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GGTAA	4367	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Rinderpest		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
AGTGA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Phocine_distemper_north_sea		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATTA	4367	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Phocine_distemper_caspian_sea,		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATTA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Dog_canine_distemper		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATTA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Ferret,		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATTA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Porcine		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
CGTAA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
Phyllostomus		CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT
GATCA	4345	CAAGCCAGCTTACCATATACTGGCTAAGTCTACAGCAATGTCCATGATTGAGTT

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Hendra		CTAAAGCCGATAAAGATGTCCTCAAGCAACACTTAGCTATAGACTCAGATGACAG
TATCA	4735	CAAAGGCTGACAAGGATGTTAAAGCAACACCTGCAATAGACTCTGACGATAA
Nipah		CAAAATTAGACAAGGATCATTAAGTGAGATTAAGGCTATAACATCAGATGATGA
CATCA	4735	CTAAAACAGAGAAAGATCATCTCAATGAAATAAGGCTATAACAGCTGATGACGA
Niniventer		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
TACTA	4444	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Berylmys		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
TATCA	4408	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Gierle		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
TATAA	4432	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Feline		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
TATCA	4475	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Dolphin		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
TATCA	4405	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Saiga_antelope,		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
CATCA	4405	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Goitered_gazelle,		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
CATCA	4405	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Domestic_sheep,		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
CATCA	4405	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Wild_goat,		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
CATCA	4405	CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA
Bharal,		CTAAAGCTAGTAAAGACCATCTCAATGAGATAATAGCAGTTGTTGGTATGATGA

CATCA 4405	CGAGATTGAGAAAGATCACATGAATGAAATAGCCGCCCTGATTGGCGATGACGA
Domestic_goat,	
CATCA 4405	CAAAATTGAGAAGGACCATATGAATGAAATTCAGCTCTCATAGGGGATGACGA
Measles	
TATCA 4427	CAAAATTGAGAAGATCATATGAACGAGGTATCTGCTCTGATAGGAGATGATGA
Rinderpest	
TATCA 4405	CAAAATTGAAAAAGACCACCTTAATGAGGTCTCTGCACTGATTGGGATGATGA
Phocine_distemper_north_sea	
CATTA 4427	CAAAGTTGAAAAGGACCACCTAAATGAAGTCTCTGCGTTAATTGGCGATGATGA
Phocine_distemper_caspian_sea,	
TATCA 4405	CAAAGTTGAAAAGGACCACCTAAATGAAGTCACTGCGTTAATTGGCGATGATGA
Dog_canine_distemper	
TATCA 4405	CAAAGTTGAAAAGGACCACCTAAATGAAGTCACTGCGTTAATTGGCGATGATGA
Ferret,	
TATCA 4405	CTAAATTGAAAAGGATCACCTCAATGAGATCACGACGTTGATGGGGATGATGA
Porcine	
TATCA 4405	CGAAATTGAGAAAGACCACCTAACGAAATTACAACTTAATAGGAGATGATGA
Phyllostomus	
CATTA 4405	

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Hendra	ATAGTCTTATAACAGAGTTTAATGGTGGATCCTGAGCTTTGCCTTATT
AGGTC 4795	ACAGCTTAATCACAGAATTCTAATAGTTGATCCTGAACGTGTTGACTTATCT
Nipah	ATAGTCTGATATCAGAGATGTTATTGGTAAATCCAAGTTATTCAAGTTATCT
AGGAC 4795	ATAGCATGATCACAGAAATGCTACTAGTAAGGCCAAAGTTGTTCAATTACCT
Niniventer	ACAGCATGATAACTGAGATGCTTAGTACAGCCAAAGCTCTAATGATCTATCT
TGGAC 4504	ATAGCTTATTACAGAATTCTACTTGTGATCCACGCTGTTACACTATATT
Berylmys	ATAGTTCATCACTGAATTCTCTAGTAGAGCCTAGACTATTTACAGTACTT
TGGGC 4468	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Gierle	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
CGGCC 4492	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Feline	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
AGGCC 4535	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Dolphin	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
AGGCC 4465	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Saiga_antelope,	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
TGGTC 4465	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Goitered_gazelle,	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
TGGTC 4465	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Domestic_sheep,	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
TGGTC 4465	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Wild_goat,	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
TGGTC 4465	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Bharal,	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
TGGTC 4465	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
Domestic_goat,	ACAGCTTCATCACAGAATTGGCTAGTGGAGCCTAGATTATTTAGTTACCT
TGGTC 4465	ATAGTTTACTGAGTTCTGTTATAGGCCAAGATTATTCACCATCTACTT
Measles	ACAGTTTATAACAGAGTTCTCCTGTAGAGCCTAGACTGTTACCGTCTACTT
GGGCC 4487	ACAGTTTATAACAGAGTTCTCCTGTAGAGCCTAGATTATTCACCGTCTACTT
Rinderpest	ACAGTTTATAACAGAGTTCTCCTGTAGAGCCTAGATTATTCACCGTCTACTT
AGGTC 4465	ACAGTTTATAACAGAGTTCTCCTGTAGAGCCTAGATTATTCACCGTCTACTT
Phocine_distemper_north_sea	ATAGTTTACTGAGTTCTTAGTTGAGCCTAGATTATTTACTGTATATCT
AGGTC 4487	ATAGTTTACTGAGTTCTTAGTTGAGCCTAGATTATTTACTGTATATCT
Phocine_distemper_caspian_sea,	ATAGTTTACTGAGTTCTTAGTTGAGCCTAGATTATTTACTGTATATCT
AGGCC 4465	ATAGTTTACTGAGTTCTTAGTTGAGCCTAGATTATTTACTGTATATCT
Dog_canine_distemper	ATAGTTTACTGAGTTCTTAGTTGAGCCTAGATTATTTACTGTATATCT
AGGTC 4465	ATAGTTTACTGAGTTCTTAGTTGAGCCTAGATTATTTACTGTATATCT
Ferret,	ATAGTTTACTGAGTTCTTAGTTGAGCCTAGATTATTTACTGTATATCT
AGGTC 4465	ATAGCTTATAACTGAGTTCTGCTGAGCCTAGATTATTCGTTGTTATT
Porcine	ACAGCTTATAACTGAGTTCTGCTGAGCCTAGATTATTCGTTGTTATT
AGGCC 4465	
Phyllostomus	
GGGTC 4465	

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ACATA	4855	AATCTATATCAATAAAATGGGCCTTGAAATTCACTCATAGCGTCCTAGAGGAAG
Nipah		
ACATA	4855	AACAAGCTTGCATTAATTGGGCATATGAGATTCACTTAGAAGACCAAAGGGAA
Niniventer		
GTATG	4564	AGGCCATAGCCATTAACTGGGCATATGAAATTATTACCGTAGACCTAAAGGGAA
Berylmys		
GTATG	4528	AGTCTATTGCAATTAATTGGTCATTGAAATCCATTACAGACGACCAAGAGGAA
Gierle		
GTATG	4552	AATACACATCATTACAATGGGCATATGAAGTCCATTATCATAGACCAAGTGGTAA
Feline		
ATACC	4595	AATGTGCAGCTATTAATTGGCCTTCGAGATACATTATCACCGTCCTCAGGCAA
Dolphin		
GTACC	4525	AGTGTGCTGCCATCAATTGGCCTTGATATACATTATCATGGCCCTCGGGCAA
Saiga_antelope,		
GTACC	4525	AGTGTGCTGCCATCAATTGGCCTTGATATACATTATCATGGCCCTCGGGCAA
Goitered_gazelle,		
GTACC	4525	AGTGTGCTGCCATCAATTGGCCTTGATATACATTATCATGGCCCTCGGGCAA
Domestic_sheep,		
GCACC	4525	AGTGTGCTGCCATCAATTGGCCTTGATATACATTATCATGGCCCTCGGGCAA
Wild_goat,		
GCACC	4525	AGTGTGCTGCCATCAATTGGCCTTGATATACATTATCATGGCCCTCGGGCAA
Bharal,		
GTACC	4525	AGTGTGCTGCCATCAATTGGCCTTGATATACATTATCATGGCCCTCGGGCAA
Domestic_goat,		
GTACC	4525	AGTGTGCTGCCATCAATTGGCCTTGATATACATTATCATGGCCCTCGGGCAA
Measles		
ATATC	4547	AGTGTGCAGCCATCAATTGGCATTGATGTACATTATCATAGACCATCAGGGAA
Rinderpest		
ATATC	4525	AGTGTACAGCTATAAATTGGCATTGACATTACATTACGACCTTCAGGGAA
Phocine_distemper_north_sea		
ATATC	4547	AATGTGCAGCAATTAACTGGGTTTGAAATCCATTACCATGACCTTCAGGTAA
Phocine_distemper_caspian_sea,		
GTACC	4525	AATGTGCTGCAATCAACTGGGCTTGAAATTCACTTACCCGACCTCTGGAAA
Dog_canine_distemper		
GTACC	4525	AATGTGCTGCAATCAACTGGGCTTGAAATTCACTTACCCGACCTCTGGAAA
Ferret,		
GTACC	4525	AATGTGCTGCAATCAACTGGGCTTGAAATTCACTTACCCGACCTCTGGAAA
Porcine		
ATATC	4525	AGTGTGCAGCCCTTAATTGGCCTTGAGATCCACTCCACCGCCGATGGTAA
Phyllostomus		
ATATC	4525	AATGTGCAGCACTCAATTGGCATTGAAATCCACTCCATCGTCCGACGGAAA

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Hendra		CAATGGTAGATTGTTGCTGATCTCATATCCAATACATCGAAACATACATAAA
AGTCT	4915	CTATGGTCACCTATTGTCAGATCTGTATCAAATACATCAAAGCACACTACAA
Nipah		AAATGACTGAAATAATGTATACATTATTAACCAGGTCTAGTAGAAGTATATTCCG
AGTGT	4915	AGATGTGTGAGTTGCTATGGATTATTAACACGAAGTAGCAAGAACTCTTTAG
Niniventer		AAATGTGTGAACCTTTGTATGGACTTCTATCAAGAACGAGCAGGACATCTTTAG
AGTGT	4624	AGATGGCTGAAGTGTGCTAAATTGCTGTCAAGAGCTAGTAGAGGTATATTCA
Berylmys		AAATGGGAGAGTTGCTCTTCTTTGTGTAGGATGAGTAAAGGTCTTTAA
AGTTA	4588	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
Gierle		AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
AGTAT	4612	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
Feline		AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
CATAT	4655	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
Dolphin		AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
AATCC	4585	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
Saiga_antelope,		AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
GATCT	4585	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
Goitered_gazelle,		AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
GATCT	4585	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
Domestic_sheep,		AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
GATCT	4585	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
Wild_goat,		AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
GATCT	4585	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
Bharal,		AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
GATCT	4585	AGATGGGAAACTTCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA

Domestic_goat,	AGATGGGGAACTCCTACTCTGCTCTCGGATGAGCAAAGGAGTATATAA
GATCT 4585	
Measles	AGATGGGTGAGCTGTTCTCGTCTTCTAGAATGAGCAAAGGAGTGTAA
GGTGC 4607	
Rinderpest	AGATGGGGAACTCCTGACCTCATTCTGCAAGGATGAGTAAGAGCGTATTCAA
GGTCT 4585	
Phocine_distemper_north_sea	AAATGGGGAAATTGTTCTTCTAGCAGAATGAGTAAAGGTGTCTCAA
AATCT 4607	
Phocine_distemper_caspian_sea,	AAATGGGTGAGTTGTTCTCTTCTGAGTAAATGAGTAAAGGAGTCTCAA
AATTT 4585	
Dog_canine_distemper	AAATGGGTGAGTTGTTCTCTTCTGAGTAAATGAGTAAAGGAGTCTCAA
AATTT 4585	
Ferret,	AAATGGGTGAGTTGTTCTCTTCTGAGTAAATGAGTAAAGGAGTCTCAA
AATTT 4585	
Porcine	AAATGGGTGAATTATTGTTCACCTTCTAACTAGGATGAGCAAAGGGTATTCAA
GATTC 4585	
Phyllostomus	AAATGGGTGAGCTCCTATTTACTTCTTAAGTCGAATGAGCAAAGGAGTATTCAA
GATAT 4585	

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Hendra	TGTCTAATGCACTGTCACATCCCAGAGTGTCAAGAGGTTGTGAATTGCGGCTT
GCTTC 4975	
Nipah	TGTCAAATGCCTTGTACATCCTAGAGTATTCAAGAGATTGAACTGTGGCTT
GCTAT 4975	
Niniventer	TCACAAATGCTCTTCACATCCTAAAGTATATCAACGGTTTGGGAAGCAGGTGT
CGTGG 4684	
Berylmys	TTTGCAATGCATTATCACATGATAAGGTCTACCGTCGGTTATGGAATGCTGGACT
GGTTG 4648	
Gierle	TGTGTAATGCTTGAGCCACGAAAGAGTTACAGAAGATTGTGGAATGCCGGTT
AGTTG 4672	
Feline	TGACCAATGCCTTAGCCACCCAGAGTCTACAAAGATTCTGGAGTGTGGTT
ATTGG 4715	
Dolphin	TTACTAATGCTTGAGTCATCCTAAAGTCTACAGGAGATTGGGACTGTGGAAT
AATTG 4645	
Saiga_antelope,	TTACTAATGCTTGAGCCACCCCAAAGTTACAAGAAATTGGCGAAGTGGCAT
CATTG 4645	
Goitered_gazelle,	TTACTAATGCTTGAGCCACCCCAAAGTTACAAGAAATTCTGGCGAAGTGGCAT
CATTG 4645	
Domestic_sheep,	TCACCAATGCTTGAGCCACCCCAAAGTTACAAGAAATTCTGGCGAAGTGGTGT
CATTG 4645	
Wild_goat,	TCACCAATGCTTGAGCCACCCCAAAGTTACAAGAAATTCTGGCGAAGTGGTGT
CATTG 4645	
Bharal,	TCACCAATGCTTGAGCCACCCCAAAGTTACAAGAAATTGGCGAAGTGGTGT
CATTG 4645	
Domestic_goat,	TCACCAATGCTTGAGCCACCCCAAAGTTACAAGAAATTGGCGAAGTGGTGT
CATTG 4645	
Measles	TTGTCAATGCTCTAACGCCACCCCAAAGATCTACAAGAAATTCTGGCATTGTGGTAT
TATAG 4667	
Rinderpest	TTGTGAATGCACTGAGCCACCCCAAAGATTACAGGAAGTTCTGGCATAGTGGGAT
TATAG 4645	
Phocine_distemper_north_sea	TAACCAACGCTCTAACGCCATCCTAAAGTATATAGGAGATTGGGACAGCGGAAT
GATTG 4667	
Phocine_distemper_caspian_sea,	TAACCAATGCATTGAGCCATCCTAAAGTATATAGACGGTTTGGGACAGTGGGAT
GATTG 4645	
Dog_canine_distemper	TAGCCAATGCATTGAGCCATCCTAAAGTATATAGACGGTTTGGGACAGTGGGAT
GATTG 4645	
Ferret,	TAACCAATGCATTGAGCCATCCTAAAGTATATAGACGGTTTGGGACAGTGGGAT
GATTG 4645	
Porcine	TCACCAACGCATTAAGTCACCCCGGGTTATCGAAGATTCTGGGACAGTGGGAT
GATTG 4645	
Phyllostomus	TAGTCAATGCTTAAGCCATCCTCGGGTTACAGGAGATTCTGGGATAGCGGAAT
GATTG 4645	

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Hendra
CCTCT 5035

TTCCCACTCAGGGTCCTTATCTCACCAACAAGATTGAGAAATTATCTCAGAA

Nipah	TGCCTACACAGGGCCTTACCTTCATCAACAAGATTTGAAAAGTTGTCTCAAAA
CCTTC 5035	
Niniventer	AGCCTATACACGGTCATCATTAGATAACCCAAACCTTGTAAATAACTGTTATTGA
CATGA 4744	
Berylmys	AACCGATACATGGCCCTCTGGATACCCAGAACATGATACATACAGTGATTGA
TATGA 4708	
Gierle	AACCCATCCACGGCCCTCTTGATACTCAAAACATGATTAATACTGTCATAGA
GATGT 4732	
Feline	AGCCTATTATGGGCCTATATAGGAAGTCAAAACTACATAATGCAATGATTGA
TTATA 4775	
Dolphin	AGCCAATACACGGCCCTCTAGATACTCAAAATTACATCTCACGGTCTGTAA
CATGA 4705	
Saiga_antelope,	AGCCGATTCAATGGGACCATCCTGGATACACAGAATTACATGTCAGTGCTGTGA
CATGA 4705	
Goitered_gazelle,	AGCCGATTCAATGGGACCATCCTGGATACACAGAATTACATGTCAGTGCTGTGA
CATGA 4705	
Domestic_sheep,	AGCCGATTCAATGGCCATCCCTGGATACACAGAATTACATGTCAGTGCTGTGA
CATGA 4705	
Wild_goat,	AGCCGATTCAATGGCCATCCCTGGATACACAGAATTACATGTCAGTGCTGTGA
CATGA 4705	
Bharal,	AGCCGATTCAATGGCCATCCCTGGATACACAGAATTACATGTCAGTGCTGTGA
CATGA 4705	
Domestic_goat,	AGCCGATTCAATGGCCATCCCTGGATACGCAGAATTACATGTCAGTGCTGTGA
CATGA 4705	
Measles	AGCCTATCCATGGTCCTTCACTTGATGCTCAAAACTTGCACACAAGTGTCAGTGCAA
CATGG 4727	
Rinderpest	AGCCAATCCATGGTCCTTCACTGGATACTCAAAACTTGCATATTACTGTATGCAA
TATGA 4705	
Phocine_distemper_north_sea	AACCTATTCAATGGGACCCCTCTAGACGCTCAGAATTGCATATAACTGTCAGTGCAA
TTTGA 4727	
Phocine_distemper_caspian_sea,	AACCTATTCAATGGGACCCCTCTTGACTCCAAAACCTACATATAACTGTATGCAA
CCTGA 4705	
Dog_canine_distemper	AACCTGTTCAATGGGACCCCTCTTGACTCCAAAACCTACATATAACTGTATGCAA
CCTGA 4705	
Ferret,	AACCTGTTCAATGGGACCCCTCTTGACTCCAAAACCTACATATAACTGTATGCAA
CCTGA 4705	
Porcine	AGCCAGTGTATGGGACCATCATTGGATACACAAAATCTGCATCAAAGTGTGCAA
CCTCA 4705	
Phyllostomus	AGCCAGTATACGGGCCATCCCTAGATACACAGAATTACACCACACAGTATGCAA
CCTTA 4705	

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Hendra	TAATCACATTTATGAAATTATCTTATGAAT-----TGGTGTGACTTCAAAAA
ATTCC 5089	
Nipah	TTGTAACATCTTATGATTATCTAATGAAAC-----TGGTGTGACTTCAGAA
ATCCC 5089	
Niniventer	TTATTACAAGTGCTTAATCTACCTAGATTGATCCTCAATAATGAGTTAGATGA
TTATC 4804	
Berylmys	TGGTTTGTGTTACCAAACCTATCTTGACATGCTATTGGATGATGAAATAGATGA
TTACC 4768	
Gierle	TAGTCTTGTGTTACCAAACCTATTAGACCTATGGTTAGATGATGAAAGCCGACAC
ATACA 4792	
Feline	TCTATAATGCATACATTACTTATTGGATGCTTATTTATCTGATCAAGTAGATGA
TACTG 4835	
Dolphin	TCTACCACTGTTATGATATCTAGATTGCTTGTGAATGATGAGCTTGATGA
TTTCA 4765	
Saiga_antelope,	TATATGGGTCTATGTCACCTATTGGATCTTGCTGAATGATGAGCTAGATGA
TTACC 4765	
Goitered_gazelle,	TATATGGGTCTATGTCACCTATTGGATCTTGCTGAATGATGAGCTAGATGA
TTACC 4765	
Domestic_sheep,	TATATGGGTCTATGTCACCTATTGGATCTTGCTGAATGATGAGCTAGATGA
TTACC 4765	
Wild_goat,	TATATGGGTCTACGTCACCTATTGGATCTTGCTGAATGATGAGCTAGATGA
TTACC 4765	
Bharal,	TATATGGGTCTATGTCACCTATTGGATCTTGCTGAATGATGAGCTAGATGA
TTACC 4765	
Domestic_goat,	TATATGGGTCTATGTCACCTATTGGATCTTGCTGAATGATGAGCTAGATGA

TTATC 4765	TTTACACATGCTATGACCTACCTCGACCTGTTGAATGAAGAGTTAGAAGA
Measles	
GTTCA 4787	TCTACAGTTGCTATGACTTACCTGACCTACTGTTGAATGACGAACGGACGA
Rinderpest	
GTTCA 4765	TTTATAATTGTTATGATTACTTGGATCTCTGCTGAACGATGAATTAGATGA
Phocine_distemper_north_sea	
ATTCT 4787	TCTATAACTGTTACATGATTACCTAGACCTCTGTTAAATGATGAATTAGATGA
Phocine_distemper_caspian_sea,	
TTTCT 4765	TCTATAACTGTTACATGATTACCTAGACCTCTGTTAAATGATGAATTAGATGA
Dog_canine_distemper	
TTTCT 4765	TCTATAACTGTTACATGATTACCTAGACCTCTGTTAAATGATGAATTAGATGA
Ferret,	
TTTCT 4765	TCTATAACTGCTATGTCACTTAGACCTCTCTCAATGATGATATCGATAA
Porcine	
TTACC 4765	TCTACAATTGTTACATCACTTATCTGGATCTCATATTGAATAATGATAACAGATGA
Phyllostomus	
TTACC 4765	

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Hendra	CTTTTTGATAGCTGAACAAGATGAAGCAGTCGTAGAATTAAGGAAAGATATAAT
AACAT 5149	CCTTTTTAATGCCAACAGGATGAAACTGTGATAAGTCTACGAGAGGATATAAT
Nipah	CACTGATGTTGAGAGTGATGACTCAGTTGTTGAAGATAGAATAGATAGCAT
AACAT 5149	CCTATCTTATTGAGAGTGATCTGGAACCTCTCAATGAGAGAGTAGACAATGC
Niniventer	CATACCTAATCTGTGAAAGTGACCTTGATGTCCTGACTGATAGGATTGACAACAT
TCAAA 4864	ATATTATAATATGTGAAACAGAGGAGACATGTTGGCGAACATGAATTGACAATT
Berylmys	CTTTCCTATTGCGAGAGTGATGAAGATGTAGTCAGTGACCGGTTGAGAATAT
TCAAG 4828	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Gierle	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
ACAGG 4852	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Feline	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
TCAAA 4895	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Dolphin	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
CCAAG 4825	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Saiga_antelope,	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
TCAAG 4825	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Goitered_gazelle,	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
TCAAG 4825	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Domestic_sheep,	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
TCAAG 4825	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Wild_goat,	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
TCAAG 4825	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Bharal,	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
TCAAG 4825	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Domestic_goat,	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
TCAAG 4825	CGTATTGCTCTGCGAGAGTGATGAGGACGTGGTCACAGACAGGTTGACAACAT
Measles	CATTCTTTGTTGAAAGCGATGAGGATGAGTACCGGACAGATTGACAACAT
CCAGG 4847	CATACCTCTCTGCAGAGTGATGAGGACATAGTGGCTGACCGCTTGATAACAT
Rinderpest	CCTTTATTGTTGAAAGTGATGAAGATGTTATTGAAAGATTGATAATAT
ACAGG 4825	CATTCATTGAAAGTGACGAGGATGTCATACCTGAAAGATTGACAACAT
Phocine_distemper_north_sea	CATTCATTGAAAGTGACGAGGATGTCATACCTGAAAGATTGACAACAT
ACAAG 4847	CATTCATTGAAAGTGACGAGGATGTCATACCTGAAAGATTGACAACAT
Phocine_distemper_caspian_sea,	CATTCATTGAAAGTGACGAGGATGTCATACCTGAAAGATTGACAACAT
ACAAG 4825	CTGTTGTTTATGTGAAAGTGATGAGGAGGTGGTCAGATGATTGATAACAT
Dog_canine_distemper	CCACTATACTCTGTGAGAGCGATGAAGATGTTGCTCTGATAGGTTGACAACAT
ACAAG 4825	
Ferret,	
ACAAG 4825	
Porcine	
TCAGG 4825	
Phyllostomus	
TCAGG 4825	

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Hendra	CAAAACACCTGTTATGATAATTGATCTGTACGCAAATCACCATAAGCCACCTTG
GATAA 5209	CCAAACATCTGTGTTATAATTGACTTATGCAAATCACCATAACCTCCTTG
Nipah	

GATAA	5209	GTAAACATTTATGTAATTGGTTGATCTGTATTGTGACTCAAGACATACTCCAAA
Niniventer		
TATTA	4924	CAAAACACCTATGTATTATTGCCGACCTTATTGTGATCCATCTCATATACCAGT
Berylmys		
AATAA	4888	CTAAACATCTAGCCATGCTCTCAGACCTGTACTGTGACCCCTCTAACTCCTCA
Gierle		
GATAA	4912	GCAGACACTTAGCTGCTTATAGATCTGTATTGTGATTCCACTAGATGTCCCAA
Feline		
TATAA	4955	CAAGGTACCTTGTATTCTGCAGATCTGTACTGTAATGCAAAAAACTGCCGTC
Dolphin		
AATAA	4885	CCAAACATCTCTGTATTGGCCGATGTATATTGCAGCTCCAAGAGGTGTCCCTTC
Saiga_antelope,		
AATAA	4885	CCAAACATCTCTGTATTGGCCGATGTATATTGCAGCTCCAAGAGGTGTCCCTTC
Goitered_gazelle,		
AATAA	4885	CCAAACATCTCTGTATTGGCCGATGTATATTGCAGCTCCAAGAGGTGTCCCTTC
Domestic_sheep,		
GATAA	4885	CCAAACATCTCTGTATTGGCCGATGTATATTGCAGCTCCAAGAGGTGTCCCTTC
Wild_goat,		
GATAA	4885	CCAAACATCTCTGTATTGGCCGATGTATATTGCAGCTCCAAGAGGTGTCCCTTC
Bharal,		
AATAA	4885	CCAAACATCTCTGTATTAGCCGATGTATATTGCAGCTCCAAGAGGTGTCCCTTC
Domestic_goat,		
GATAA	4885	CCAAACATCTCTGTATTGGCCGATGTATATTGCAGCTCCAAGAGGTGTCCCTTC
Measles		
GATTC	4907	CAAAACACTTGTGTATTGGCAGATTGTACTGTCAACCAGGGACCTGCCACC
Rinderpest		
CATCA	4885	CTAGACATCTGTGTCTATCGGATTATACTGCAATCCCAGAGGATGCCGAC
Phocine_distemper_north_sea		
GATTC	4907	CCAGACACCTATGTATTCTGCTGACCTTATTGCAATCCCCGTAGTTGCCACA
Phocine_distemper_caspian_sea,		
GATTC	4885	CCAGGCACCTATGCATCTTATCTGACCTTATTGTAACCCTCGTATTGTCCCCA
Dog_canine_distemper		
GATTC	4885	CCAGGCACCTATGCATCTTATCTGACCTTATTGTAACCCTCGTATTGTCCCCA
Ferret,		
GATTC	4885	CCAGGCACCTATGCATCTTATCTGACCTTATTGTAACCCTCGTATTGTCCCCA
Porcine		
TATCA	4885	CTAGACACTTATGTATAATCACAGATCTTATTGTGATAACAAGAGATTGCCACC
Phyllostomus		
TATAA	4885	CTAGGCATCTATGTATAATAACAGATTGTATTGTGATACAAAGAAATGTCCGCC

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Hendra		TTGATCTCAACCCACAAGAGAAGATATGTGTTCTAGGGACTTATATCTAAGTG
CCGTC	5269	TAGATCTAAACCCACAAGAAAAATATGTGACTCGGTGACTTATTCTAAATC
Nipah		GAGGGTTTCCACCATTACAGAAGTGTAAAGATATTGTCGGATTTCACCATTG
TAGGC	5269	GAGGTTAACCCCCATACAAAATGCAGAATACTTACGGATCATATCAATTACA
Niniventer		GAGGTCTCACTCCTCATGAAGTGTAAAGTTCTACATGAGAACTTATTATGCA
TTCTC	4984	AAGGGGCAGATACAATTATGAGAAAATCAATTCTAGATCTTATTGATAATGA
Berylmys		GGGAGCTGCACCTATAAGAAGTGTGCAGTACTTACACAATTCAAATCGGA
AAGTA	4948	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Gierle		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
GAGTA	4972	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Feline		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
GAGGA	5015	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Dolphin		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
AGCAT	4945	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Saiga_antelope,		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
ATCAG	4945	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Goitered_gazelle,		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
ATCAG	4945	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Domestic_sheep,		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
ATCAG	4945	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Wild_goat,		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
ATCAG	4945	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Bharal,		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
ATCAG	4945	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
Domestic_goat,		TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA
ATCAG	4945	TCGGGATGTCTCTATAGAAAATGTACCATTCTCACACATTACATCAAGGGAGA

Measles	GAGGTCTAAGGCCGGTAGAGAAATGTGCAGTTCTAACCGATCATATCAAGGCAGA
GGCTA 4967	GGGGTCTACAACCAGTAGAGAAATGTGCCATCATGACCAAACACATCGAGGCCGA
Rinderpest	GAGGATTAACACCAACACAGAAGTGTGCTGTTAATAAAACCTAAAGCTGCA
GGCAA 4945	GTGGGTTGACACCAACACAGAAATGTGCTGTGTTATCGGGTACTAAAGTCAA
Phocine_distemper_north_sea	GTGGGTTGACACCAACACAGAAATGTGCTGTGTTATCGGGTACTAAAGTCAA
AGCTC 4967	GTGGGTTGACACCAACACAGAAATGTGCTGTGTTATCGGGTACTAAAGTCAA
Phocine_distemper_caspian_sea,	GTGGGTTGACACCAACACAGAAATGTGCTGTGTTATCGGGTACTAAAGTCAA
AGCCC 4945	GTGGGTTGACACCAACACAGAAATGTGCTGTGTTATCGGGTACTAAAGTCAA
Dog_canine_distemper	GAGGTCTCTCCCCCGCAGAGAAATGCAAAACACTGCTAAATTCTGAGGACCCA
AGCCC 4945	GAGGACTACCTCCACTGAAAATGCAAGATGTTACTTAAGTTACGGGACA
Ferret,	*
AGCCC 4945	*
Porcine	*
AGCAC 4945	*
Phyllostomus	*
GTCTC 4945	*

Hendra	ATACTGATGTGTCATCTAGGTCTTGAATATCACTGATCTGGATTTATGGTTT
TTATG 5329	ATGTGGACACGTCCTCCAGATCATGGAATACTTCTGACCTGGATTTGAATATT
Nipah	AATCTAGCCCTTCAGGACTTTTGGAACACTGCACCAATAGTTATTGATCACTA
CTATG 5329	GTCAGGCTATAAGTGGTATTTTGGAACACAAAACCCATAAAGATTGAACATTA
Niniventer	CACTAGTGTCAAGGAGGAGCCTCTGGAATAAGGAGCCTCTAAAGTTGAACACTA
TCCAT 5044	GAACAAATCCACTCGGTTGACATGGAACCTTGACCCGTTACTCGTGGATCATTT
Berylmys	TAATTCTCCTGGGGGTTGGATTGGAATGATGAACCGATAGTAGTAGACCACCTT
TCCTT 5008	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Gierle	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
CCCGT 5032	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Feline	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
TAGCT 5075	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Dolphin	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
TTCTT 5005	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Saiga_antelope,	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
CTCAT 5005	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Goitered_gazelle,	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
CTCAT 5005	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Domestic_sheep,	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
CTCAT 5005	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Wild_goat,	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
CTCAT 5005	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Bharal,	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
CTCAT 5005	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
Domestic_goat,	TACAATCCCCGTCTGGGACCTCATGGAACACTGATCCCCTGTAGTAGATCATTA
CTCAT 5005	GGTTATCTCCAGCAGGATCTCGTGGAACATAATCCAATTATTGATGACCATTA
Measles	AACTATCCCTCGCTGCCCTTCATGGAACATAGGCCATTGTAATTGATCACTT
CTCAT 5027	TAGAATCTCATGTTGGCTTAACATGGAATGACAAGCCTATTTAATTGATCAATA
Rinderpest	TAGAATCCCATGTTGGCTGACATGGAATGACAAACCTATCTTAATAGATCAATA
CTCTT 5005	TAGAATCCCATGTTGGCTGACATGGAATGACAAACCTATCTTAATAGATCAATA
Phocine_distemper_north_sea	TAGAATCCCATGTTGGCTGACATGGAATGACAAACCTATCTTAATAGATCAATA
TTCAT 5027	AATTAGACCGTCCGGTTATCTGGAATGATCAACCGATTTAGTAGATCAATA
Phocine_distemper_caspian_sea,	AATTAGACCCCTCAGGTTGGCCTGGAATGATCAACCTGTTGGGACCAATA
TTCAT 5005	
Dog_canine_distemper	
TTCAT 5005	
Ferret,	
TTCAT 5005	
Porcine	
TTCCT 5005	
Phyllostomus	
CTCAT 5005	

Hendra	CTTCGTTACTTATCTAAGAAGAGGAATAATCAAGCAGCTCAGAATTAGGCAAGT
GACAG 5389	CATCTTGACTTATTTGAGAAGAGGTATAATAAAACAATTAAGGATAAGACAAGT
Nipah	
TACTG 5389	

Niniventer		GTTCATTGACATATATCAGACGAGGAACAATTAAACAGATTAGGATTAGAGTTGA
TCCAG	5104	
Berylmys		GTTCACTAACTTATATTAGGAGAGGGACAATTAAACAAATCAGACTCAGAGTTGA
TCCTG	5068	
Gierle		GTTCCCTTACATACATCCGGAGAGGGTCAATAAGCAAATAAGGCTAAGAGTTGA
TCCAG	5092	
Feline		GTTCTATTACGTATCTGAGGAGAGGTATTATAACAGATGAGGTTAAGAGTTGA
TCCAA	5135	
Dolphin		GCTCCTAACATATCTCAGAAGAGGGCGTTAACAGATCAGGCTGAGGGTTGA
TCCTG	5065	
Saiga_antelope,		GCTCTCTGACCTACCTCGCCGCGGTTCCATCAAACAAATCAGGTTGAGGGTGGGA
TCCTG	5065	
Goitered_gazelle,		GCTCTCTGACCTACCTCGCCGCGGTTCCATCAAACAAATCAGGTTGAGGGTGGGA
TCCTG	5065	
Domestic_sheep,		GCTCTCTGACCTACCTCGCTGCGGTTCCATCAAACAAATCAGGTTGAGAGTGGGA
TCCTG	5065	
Wild_goat,		GCTCTCTGACCTACCTCGCCGCGGTTCCATCAAACAAATCAGGTTGAGAGTGGGA
TCCTG	5065	
Bharal,		GCTCTCTGACCTACCTCGCCGCGGTTCCATCAAACAAATCAGGTTGAGGGTGGGA
TCCTG	5065	
Domestic_goat,		GCTCTCTGACCTACCTCGCCGCGGTTCCATCAAACAAATCAGGTTGAGAGTGGGA
TCCTG	5065	
Measles		GCTCTCTGACTTATCTCCGTCGAGGATCTATCAAACAGATAAGATTGAGAGTTGA
TCCAG	5087	
Rinderpest		GTTCTCTGACTTACTTAAGCGGGGTCGATCAAGCAAATTGGTTGAGGGTTGA
TCCAG	5065	
Phocine_distemper_north_sea		GTTCCCTAACCTACCTGAGAAGAGGGCTATCAAGCAAATAAGATTAAGAGTTGA
CCCTG	5087	
Phocine_distemper_caspian_sea,		GTTCCCTGACATATCTTAGAAGAGGGCTCAATCAAGCAGATAAGACTGAGAGTGGGA
TCCCG	5065	
Dog_canine_distemper		GTTCCCTGACATATCTTAGAAGAGGGCTCAATCAAGCAGATAAGATTGAGAGTGGGA
TCCCG	5065	
Ferret,		GTTCCCTGACATATCTTAGAAGAGGGCTCAATCAAGCAGATAAGATTGAGAGTGGGA
TCCCG	5065	
Porcine		GCTCTAACCTACCTTAGAAGAGGGATGCATAAGCAAATCAGGCTAAGGGTAGA
TCCTG	5065	
Phyllostomus		GCTCCCTCACTTATCTCAGGAGAGGGTGTATTAAACAAATTGGCTAAGAGTTGA
CCCAG	5065	

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Hendra		AAGTAATCGACACCCTACAATGCTAAGAGATAATATTTAGTAGAAAACCCGCC
TATTA	5449	
Nipah		AGGTTATAGATACCACAATGTTAAGGGACAATATAATTGTAGAGAAATCCTCC
TATTA	5449	
Niniventer		GATTATCGATGCCGCATCACAGCAATTACAGAATCTTGATCTGCTCCTGTTGA
TGATA	5164	
Berylmys		GGGTAGCAGAAGACATTGTTAGTGACTTGATCCACAGATTGATAACAAGAA
ATTAC	5128	
Gierle		GAGTAGTTGAGGATGTCATAATTGAGTTAATGCAAGGCCCTGAAGTTGTCCTGA
TACCA	5152	
Feline		GTGTATCGTGGAACTATCTAGGATGATTAAGCCTGATGCGGTTATCAAGCACC
TAAAAA	5195	
Dolphin		GGTCGTATCGGAAGTTCTAATTGACGCTCTGACCATAACCTGGACCAATTAA
AGCTA	5125	
Saiga_antelope,		GGTTTGATTGAGGCCTTGACAGACGTCGACTTTAAACAAACCTCGCAAAGCTAA
GTTAG	5125	
Goitered_gazelle,		GGTTTGATTGAGGCCTTGACAGACGTCGACTTTAAACAAACCTCGCAAAGCTAA
GTTAG	5125	
Domestic_sheep,		GGTTTGATTGAGGCCTTGACAGACGTCGACTTTAAACAGCCTCGCAAGGCTAA
GTTAG	5125	
Wild_goat,		GGTTTGATTGAGGCCTTGACAGACGTCGACTTTAAACAGCCTCGCAAGGCTAA
GTTAG	5125	
Bharal,		GGTTTGATTGAGGCCTTGACAGACGTCGACCTAAACAAACCTCGCAAAGCTAA
GTTAG	5125	
Domestic_goat,		GGTTTGATTGAGGCCTTGACAGACGTCGACTTTAAACAAACCTCGCAAAGCTAA
GTTAG	5125	
Measles		GATTCACTTGTGACGCCCTCGCTGAGGTAATGTCAGTCAGCCAAAGGTCGGCAG

CAACA	5147	GGTCATTGGAGGCTCTAACTGTAACAGATCCGCAGAAACCAACTTCAGCA
Rinderpest		
TGAAC	5125	GATTATTGCAGACGCCATGGGATGTGGAAATAGTCCCTAAAAAGAGGCC
Phocine_distemper_north_sea		GATTCACTCACTGATGCTGTTGGATGCTTAGAAAGGCGTCCTCTAAGAAATAATT
TGCCT	5147	GATTCACTCACTGATGCTGTTGGATGCTTAGAAAGGCGTCCTCTAAGAAATAATT
Phocine_distemper_caspian_sea,		GATTCACTCACTGATGCTGTTGGATGCTTAGAAAGGCGTCCTCTAAGAAATAATT
TACCT	5125	GATTCACTCACTGATGCTGTTGGATGCTTAGAAAGGCGTCCTCTAAGAAATAATT
Dog_canine_distemper		GATTCACTCACTGATGCTGTTGGATGCTTAGAAAGGCGTCCTCTAAGAAATAATT
TACCT	5125	GATTCACTCACTGATGCTGTTGGATGCTTAGAAAGGCGTCCTCTAAGAAATAATT
Ferret,		GATTCACTCACTGATGCTGTTGGATGCTTAGAAAGGCGTCCTCTAAGAAATAATT
TACCT	5125	GTTTGTCAGCTGCACTCTCAGAATCCAAAGATCCCCCTGCATTATGAGGTC
Porcine		GATTGTTTCAGATGCATTATCAGACTCTAAGGGATTCCAGAGAGATACGATCTG
AGGCA	5125	
Phyllostomus		
GGGCA	5125	

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Hendra		AAACTGGAGTACTAGATATTAGAGGT-----TGCATAATATATAATCTAGAAGA
AATCT	5503	AAACAGGAGTGTAGACATCAGAGGT-----TGTATAATATACAATTAGAGGA
Nipah		GAATGAATTGAGTACTCAATTCCCTCATCTGCACCTGTAATATCATGGGACAA
AATCC	5503	CAGATATTAATTGGAGCAACCCAGTTGCTCAGACATATGATTCTGATTTAGATGA
Niniventer		CTCCTTCCGGCTGGCGGATGCTCTACCAGGAACACATGCCTGGATCTAGATGA
ACTGA	5224	TTCCGTCTCATGGCTTTATAGATATCAACCTGAAGTAAATGACCTTAATGT
Berylmys		AGGAGATTAATTAGATAGCATAAATTCTATCCCCCAAGGAAGATGTTGCACG
TATCA	5188	ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
Gierle		ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
AGTCA	5212	ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
Feline		ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
AATTT	5255	ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
Dolphin		ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
ATTAC	5185	ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
Saiga_antelope,		ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
TTTT	5185	ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
Goitered_gazelle,		ATATATCGGTGTTGGTTGACTGATTCTCTCCCCCTACGACAACGTCGGTGA
TTTT	5185	ACATCTAAATATGAGCATCAAGGATTCAGACCTCCACACGATGATGTTGCAA
Domestic_sheep,		AAGCCGCTGATATGCACATAAGCAATTAGGCCCTATGATGGTGTGGCAGA
TTTC	5185	CTGTACCTCTCACCTAAAAACAGGATTGACCGCCTAAAGATGATCTTACAAA
Wild_goat,		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
TTTCC	5185	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Bharal,		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
TTTTC	5185	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Domestic_goat,		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
TTTTC	5185	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Measles		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
ATTGC	5207	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Rinderpest		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
GCTGT	5185	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Phocine_distemper_north_sea		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
ACTTT	5207	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Phocine_distemper_caspian_sea,		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
ACTTC	5185	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Dog_canine_distemper		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
ACTTC	5185	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Ferret,		CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
ACTTC	5185	CTAAGGCCTCAGAATTAAAGTCAGAATTGACCCACCGAAAGATGACCTGCCAA
Porcine		AAACAGGATACCCAGATGAGCCTAGGACTTGAACCCCCCTAGACGATTTACTATC
ATTAA	5185	AATCAGATAGACAATTAAACCCACAACCTTGAAACCCCCCTCGGACGACATACTCAC
Phyllostomus		
CTTGA	5185	

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Hendra		TATCAATGAATACTAAGTCACGTCAAGAAAGGTGTTCAATTGGGTTCAAAGTT
GTCAG	5563	TGTCTATGAACACAAAAATCAGCATAAAAAGATCTTAATCTTAATAGTAGGCC
Nipah		ATTCACTTATTAAGACTATTGACAAACAAGCCCCATTAGTCGGTATCTCACTCAA
GTCAG	5563	
Niniventer		

CAATT	5284	TTTCTGGCCTCCGACCCATTGATAAAAGTAGTCCATTGTCAGGGAGATGATAAC
Berylmys		
TAACT	5248	TATCCAATCTCCGTACTTTGATAAGTCTGCTCTGACAGGTGATTCACTCCC
Gierle		
GAACT	5272	TTGGAGAGCTGAATAGCAAATGAAAGACATTCTATTGGACAGATTAGGATACA
Feline		
GAATT	5315	TCAGTACTATAGGCACAGCCCAGCATGATCTCCCATAATCGTACTAGAGTAAT
Dolphin		
CAACT	5245	TAGGAACATATCAACACATTGAGGCACGATCTGCCTGTACCGGAACCGGGGTCTC
Saiga_antelope,		TAGGAACATATCAACACATTGAGGCACGATCTGCCTGTACCGGAACCGGGGTCTC
GAACT	5245	TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
Goitered_gazelle,		TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
GAACT	5245	TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
Domestic_sheep,		TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
GAACT	5245	TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
Wild_goat,		TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
GAACT	5245	TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
Bharal,		TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
GAACT	5245	TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
Domestic_goat,		TAGGGACTATCAACACATTGAGGCACAATCTGCCTGTACCGGAACCGGGGTCTC
GAACT	5245	TCAAAGATATCAACACAAAGCAAGCACAATCTTCCATTTCAGGGGTAGTCTCGC
Measles		TAGGGACGATAAAACTCGAGTAAGCATAACCTTCTATACTTGCACAGGTGTTA
CAATT	5267	TAAGTCATTGTCAACAAAACCCATAACTGCCAATCACGGCTAGGAGTTAG
Rinderpest		TGAGTCAGCTGTCAACAAGGACACATAACTTACCTATTACAGGATTAGGAGTCG
TAATT	5245	TGAGTCAGCTGTCAACAAGGACACATAACTTACCTATTACAGGATTAGGAGTCG
Phocine_distemper_north_sea		TGAGTCAGCTGTCAACAAGGACACATAACTTACCTATTACAGGATTAGGAGTCG
AAATT	5267	TGGGATCTATTAACACAAATGCACACAATTCCGTATAGGGAAAGGTCTCCG
Phocine_distemper_caspian_sea,		TAGGATCCATTAACACAGATGCCAGCAACATCCCTGTGATAGGAGAAGGTGTGAG
GAACT	5245	
Dog_canine_distemper		
GAACT	5245	
Ferret,		
GAACT	5245	
Porcine		
AAATT	5245	
Phyllostomus		
AAATT	5245	

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Hendra		TTGAAAACCACAAATATAGAAGGATAGGATTAATCGCTTCTGCTACAAGGC
ATTA	5623	TGGAGAACATCAAATATAGAAGGATAGGTCTCAACTCATCTGTTACAAGGC
Nipah		ACGAGGTTCATGCATTAGGAGATTGAACTCAACTGCTTGTACAAAGC
ATTA	5623	ATGAGATTGATGCATACAGGAGAGTAGGGTAAACTCTAGTGCTTGTATAAAGC
Niniventer		ACGAGATCCATGCTTATCGGAGAGTTGAACTCAAGTGCATGCTATAAAGC
TCTGG	5344	ATGAAATACATGCATATAGGAGGATCGGAGTTAATTCAACTGCATGTTATAAAGC
Berylmys		ATGAAGTACACGCTTACAGGAGAATAGGGTTGAACTCATCTGCTTGTACAAAGC
TTTG	5308	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Gierle		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
GCTTG	5332	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Feline		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
TCTAG	5375	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Dolphin		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
AGTAG	5305	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Saiga_antelope,		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
CGTAG	5305	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Goitered_gazelle,		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
CGTAG	5305	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Domestic_sheep,		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
CGTAG	5305	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Wild_goat,		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
CGTAG	5305	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Bharal,		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
CGTAG	5305	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Domestic_goat,		ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
CGTAG	5305	ATGAAGTCCACGCTTATCGTAGAATTGGCCTGAATTCACTCAGCATGTTATAAAGC
Measles		ATGAAATCCATGCTTCCGCAGAATCGGGTAAACTCATCTGCTTGTACAAAGC
TGTTG	5327	

Rinderpest		ACGAGGTCCATGCGTTCGCAGGATAGGATTAACCTCGTCTGTTACAAGGC
AGTGG	5305	
Phocine_distemper_north_sea		ACGAAATTCACGCATTAGGAGAACGGGTTAACTCTACTGCCTGCTATAAAGC
AGTTG	5327	
Phocine_distemper_caspian_sea,		ATGAGGTTCACTCATTCAAGAAGAATTGGGATCAACTCTACTGCATGTTACAAGGC
AGTTG	5305	
Dog_canine_distemper		ATGAGGTTCATTCAATTCAAGAAGAATTGGGATCAACTCTACTGCATGTTACAAGGC
AGTTG	5305	
Ferret,		ATGAGGTTCACTCATTCAAGAAGAATTGGGATCAACTCTACTGCATGTTACAAGGC
CGTTG	5305	
Porcine		ACGAAATCCATGCATTAGAAGGTTGGGTGTAACCTCAACAGCATGTTATAAAGC
AGTAG	5305	
Phyllostomus		ACGAAATCCATGCATTCAAGAGACTTGGGGTCAACTCTACAGCATGTTACAAGC
GGTGG	5305	

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Hendra		ATCTGTCACCGTTGATTCAACGCTACCTGCCGCAGGTTACAACGATTATTGT
AGGTG	5683	
Nipah		ATCTATCACCTCTGATTCAAAGGTATTCGCCGTCGGAGCTAAAGTTGTTAT
AGGAG	5683	
Niniventer		AAATAATCCCGTCTATTGCGGGTCATAGATCATGATCTCCTAGATTATATT
AGGGG	5404	
Berylmys		AAATCTTGTCAATTATAACTGGGTACATCGATCATACTAAAGCTAGGATGTACAT
TGGGG	5368	
Gierle		AAATTGTGCCITTACATCTGGGGTACATCAATCATGAGGCAGCAAGACTCTATCT
AGGTG	5392	
Feline		AGCTATTGTCIGTTCTAAATCGGTTATGCTAATCCATCAGGTGCATTGTTTT
AGGTG	5435	
Dolphin		AAGTATCCTCGGTAATCAAGAGCATGATTGAACCAGGAGAGGATGGTTATTCTT
GGGTG	5365	
Saiga_antelope,		AGATCTCCACGTTAATCAAGCCATCCTTAGAAGTCGGAGAGCATGGATTGTTCTT
AGGAG	5365	
Goitered_gazelle,		AGATCTCCACGTTAATCAAGCCATCCTTAGAAGTCGGAGAGCATGGATTGTTCTT
AGGAG	5365	
Domestic_sheep,		AGATCTCCACGTTAATCAGGCCATCCTTAGAAGTCGGAGAGCATGGATTGTTCTT
AGGAG	5365	
Wild_goat,		AGATCTCCACGTTAATCAAGCCATCCTTAGAAGTCGGAGAGCATGGATTGTTCTT
AGGAG	5365	
Bharal,		AGATCTCCACGTTAATCAAGCCATCCTTAGAAGTCGGAGAGCATGGATTGTTCTT
AGGAG	5365	
Domestic_goat,		AGATCTCCACGTTAATCAAGCCATCCTTAGAAGTCGGAGAGCATGGATTGTTCTT
AGGAG	5365	
Measles		AGATATCAACATTAATTAGGAGATGCCTTGAGCCAGGGGAAGACGGTTGTTCTT
GGGTG	5387	
Rinderpest		AGATATCCACGCTAATCAAGAGCTCTATGGACCCAGAAGAGGATAGCTGTTCTT
AGGGG	5365	
Phocine_distemper_north_sea		AGATAATTCTCTTATCAAAAAAGAATTCTCTACAGGAGAACACGGATTATTTTT
GGGAG	5387	
Phocine_distemper_caspian_sea,		AAATAGCTCTGTGATTAAGAACGAATTACGTCTGAAGAACACGGATTATTCCT
AGGAG	5365	
Dog_canine_distemper		AAATAGCTTCCGTGATTAAGAACGAATTACGTCTGAAGAACACGGATTATTCCT
AGGAG	5365	
Ferret,		AAATAGCTCTGTGATTAAGAACGAATTACGTCTGAAGAACACGGATTATTCCT
AGGAG	5365	
Porcine		AAATTGCATCATTGATCCGCTGCCATTGAGAACGGTACAGGAGATCATGGATTATTCCT
CGGGG	5365	
Phyllostomus		AGATTGTCTCCCTGATACGGTGTAACTCGAGATAGGAGATCATGGATTATTCCT
TGGTG	5365	

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Hendra	AAGGGTCAGGAAGTATGATGCTATTATATCAACAGACTT	AGGATGTTGATCGATATC
CTTTT	5743	
Nipah	AAGGTTCTGGGAGCATGATGTTATTATATCAGTCTACATT	GGGGCAATCAATTTC
TTTTT	5743	
Niniventer	AGGGAGCAGGTTCTATGCTTGCAGTCTATCAACATTACTT	AGGTGATGGTTAGT
TTATT	5464	

Berylmys	AGGGGGCGGGATCAATGATGGTAACTACCAACATTATTGGGTATGGCAAAGT
TTACT 5428	
Gierle	AAGGAGCAGGATCTATGATGGTAGTATCAACATTATCTGGTATGGACAAGT
CTATT 5452	
Feline	AAGGAGCAGGATCAATGCTGGTACATACCGTCTTGTCCATTAAAGACAAT
TTATT 5495	
Dolphin	AAGGTTCAAGGTTCTATGCTAGTCACGTAGGGAAACTCAAGCTAACGTTG
TTATT 5425	
Saiga_antelope,	AAGGTTCCGGTTCAATGCTGGTGCCTACAAAGAAGTTCTAAATTAGCAAATTG
TTACT 5425	
Goitered_gazelle,	AAGGTTCCGGTTCAATGCTGGTGCCTACAAAGAAGTTCTAAATTAGCAAATTG
TTACT 5425	
Domestic_sheep,	AAGGTTCCGGTTCAATGCTGGTGCCTACAAAGAAGTTCTAAATTAGCAAATTG
TTATT 5425	
Wild_goat,	AAGGTTCCGGTTCAATGCTGGTGCCTACAAAGAAGTTCTAAATTAGCAAATTG
TTATT 5425	
Bharal,	AAGGTTCCGGTTCAATGCTGGTGCCTACAAAGAAGTTCTAAATTAGCAAATTG
TTATT 5425	
Domestic_goat,	AAGGTTCCGGTTCAATGCTGGTGCCTACAAAGAAGTTCTAAATTAGCAAATTG
TTATT 5425	
Measles	AGGGTCGGGTTCTATGTTGATCACTTATAAGGAGATACTAAACTAAACAAGTG
CTTCT 5447	
Rinderpest	AAGGATCAGGGTCAATGTTGATAACGTATAAGAAATCCTAAATTAAAGAAGTG
CTTTT 5425	
Phocine_distemper_north_sea	AAGGCTCAGGTGCTATGCTGACTGTATATAAGAGTTATAAGGTTAACAGATG
CTACT 5447	
Phocine_distemper_caspian_sea,	AAGGTTCAGGTGCAATGTTGACAGTATATAAGAGCTATTAAGATTGTCAAGATG
TTATT 5425	
Dog_canine_distemper	AAGGTTCAGGTGCAATGTTGACAGTATATAAGAGCTATTAAGATTGTCAAGATG
TTATT 5425	
Ferret,	AAGGTTCAGGTGCAATGTTGACAGTATATAAGAGCTATTAAGATTGTCAAGATG
TTATT 5425	
Porcine	AAGGGTCTGGAGCAATGCTGGTGCATATAAGGAAATTCTAAATTAGGCAGATG
CTATT 5425	
Phyllostomus	AGGGTTCAGGAGCCATGTTGGTGTATATAAGGACCTTCTAGGATTAAGTAAGTG
CTACT 5425	

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Hendra	ACAACTCCGGTATTGATGGTATTATACCAAGGGCAGAGAGAATTGAGATTATT
CCCTT 5803	
Nipah	ACAATTCAAGGTATAGATGGAGATTATACCAAGGTCAAAGAGAACTGAAACTATT
TCCCT 5803	
Niniventer	ATAATTCAAGGGTATCAAGTGAGTCATTAAAAGTCAGCGAGAGTTCAATCCATA
TCCGT 5524	
Berylmys	ATAATTCAAGGGTTACATAGAAAATCTCAAGGTCAAGCGAGAATTGACCATT
CCCTG 5488	
Gierle	ACAATTCAAGGTGTTCATCCTGGTCTCTCAACAGCCAACGAGAGTTAGACCGTA
TCCAT 5512	
Feline	ATAATAGTGGTATTCAGTTCAAAATGTTCAAGGCCAGAGAGAATTGAGTCTATA
TCCAT 5555	
Dolphin	ACAACAGAGGAGTGTCACTGAGCTAGATCTGGCAAAGAGAGATATCTCCCTA
TCCAT 5485	
Saiga_antelope,	ACAACAGCGGAGTAACAGCGGAGGGCAGAGCCGGACAGAGGAAATATCTCCCTA
TCCTT 5485	
Goitered_gazelle,	ACAACAGCGGAGTAACAGCGGAGGGCAGAGCCGGACAGAGGAAATATCTCCCTA
TCCTT 5485	
Domestic_sheep,	ACAACAGCGGGTAACAGCGGAGGGCAGAGCCGGACAGAGGAAATATCTCCCTA
TCCTT 5485	
Wild_goat,	ACAACAGCGGGTAACAGCGGAGGGTAGAGCCGGACAGAGGAAATATCTCCCTA
TCCTT 5485	
Bharal,	ACAACAGCGGGTAACAGCGGAGGGCAGAGCCGGACAGAGGAAATATCTCCCTA
TCCTT 5485	
Domestic_goat,	ACAACAGCGGGTAACAGCGGAGGGCAGAGCCGGACAGAGGAAATATCTCCCTA
TCCTT 5485	
Measles	ATAATAGTGGGTTCCGCCATTCTAGATCTGGTCAAAGGAAATTAGCACCCCTA
TCCCT 5507	
Rinderpest	ACAACAGCGGGTGTCAAGCAGAATCTAGATCAGGCCAGCGAGAGTTAGCCCCTA

CCCAT	5485	ATAACAGTGGTGTATCAGTAGAGTCAGAACGAGAGATCTCACCTA
Phocine_distemper_north_sea		
TCCTT	5507	ATAACAGTGGTGTAGAGTCAGAACGAGAGATTCACCTA
Phocine_distemper_caspian_sea,		
CCCTT	5485	ATAACAGTGGTGTGCGTAGAACATCCAGAACGAGAGATTCACCTA
Dog_canine_distemper		
CCCTT	5485	ATAACAGTGGTGTGCGTAGAACATCCAGAACGAGAGATTCACCTA
Ferret,		
CCCTT	5485	ATAACAGTGGTGTGCGTAGAACATCCAGAACGAGAGATTCACCTA
Porcine		
CCCAT	5485	ATAACAGTGGTGTCTCCTGATTCCGAACTGGCAACGGAACTATCCCCGA
Phyllostomus		
TCCGT	5485	ATAATAGCGGTGTTCTCTGATGCCAGGACAGGTCAAGAGGAGATACCCATA

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Hendra		CCGAATATTCAATAGCTGAAGACGATCCGTACAATCTGATAAGCTAAAGGTCT
AGTGG	5863	CTGAATACTCAATTGCTGAGGAAGACCCATCTGACGGGGAAATTGAAAGGACT
Nipah		CGGAAGTGAGCTTAATCAAGAACCGACAG-----CCTCATATTTTACATCAA
AGTGG	5863	CTGAAGTCAGTTGGCCATCCGAAATTCT-----CGAGGACTTGGATTCAAG
Niniventer		CTGAGGTATCTTGGCGAAAGGTCAACC-----ATGGACAAATGGAGTTCTAA
TGTGC	5578	CTGAAGTGGCACTAGTTGACAACAAAAAT-----CGCTTGGCTAATGACCCCAA
Berylmys		CAGAAGTTAGTCTTGTGAACACCAAC-----TAGGGCTGGATCGTAG
TATAC	5542	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Gierle		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
GGTCA	5566	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Feline		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
TATCA	5609	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Dolphin		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
TGTTA	5533	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Saiga_antelope,		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
TGTTA	5533	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Goitered_gazelle,		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
TGTTA	5533	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Domestic_sheep,		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
TGTTA	5533	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Wild_goat,		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
TGTTA	5533	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Bharal,		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
TGTTA	5533	CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
Domestic_goat,		CAGAGATGAGCCTAGTAGAGAACATCAA-----TGGGGATAGAGCGGAG
TGTTA	5533	CCGAAGTTGGCTTGTGAACACAGAA-----TGGGAGTAGGTAATAT
Measles		CTGAGGTAAAGCCTGGTCGAACATCAGC-----TTGGTGCAGAGAAAAC
TGTCA	5555	CTGAGGTAAAGCTTAGAGCATCAAT-----TAGGGCTTGATCGTCT
Rinderpest		CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
TGTCA	5533	CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
Phocine_distemper_north_sea		CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
GGCGA	5555	CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
Phocine_distemper_caspian_sea,		CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
GGCGA	5533	CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
Dog_canine_distemper		CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
GGTGA	5533	CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
Ferret,		CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
GGTGA	5533	CTGAGGTCAAGTCAGTGGGAAACATCAAT-----TAGGACTCGATAAATT
Porcine		CAGAAGTGGAGTATGGTTGAGCATAAAT-----TATGTCTGAAAAATC
AGTTA	5533	CAGAGGTTAGCCTGGTCGAGCACAAGC-----TTGGTCAAGAGAGATC
Phyllostomus		
AGTCA	5533	

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Hendra		TCCCATTATTAATGGAAGGCCGAAACCACGTGGATAGGAACTTAGATTCTATA
CGAGT	5923	TGCCCTATTCAATGGAAGACCAGAAACATGGATCGGGAAATTAGACTCCTA
Nipah		AATTATTATTCAATGGTAGACCTGAGGTGACATGGTAGGCAATCCAGAATGTT
CGAGT	5923	AAGTATTGTTAACGGCAGACCAGAAGTGACATGGATTGAAATCTGAGTGTAA
Niniventer		
TAACT	5638	
Berylmys		

TCACT	5602	CGGTCTTTCAATGGACGCCCTGAGGTGACATGGCTGGAAACTTAGAGTGT
Gierle		
CCATT	5626	AAGTCTTGTCAATGGTAAACCAGAGTCTACGTGGGTGGAAACATCGACTGTT
Feline		
TGCTT	5669	AGGTATTATTCAACGGAAACCAGAGGTGACATGGTAGGTAAATGTAGATTGT
Dolphin		
TAAGT	5593	AAGTGCCTTCAACGGAAACCTGAAGTAACCTGGGTGGGGACCACAGATTGCT
Saiga_antelope,		
CAAGT	5593	AAGTGCCTTCAACGGAAACCTGAAGTAACCTGGGTGGGGACCACAGATTGCT
Goitered_gazelle,		
CAAGT	5593	AAGTGCCTTCAACGGAAACCTGAAGTAACCTGGGTGGGGACCACAGATTGCT
Domestic_sheep,		
CAAGT	5593	AAGTGCCTTCAACGGCAAACCTGAGGTAACCTGGGTGGGGACCACCGATTGCT
Wild_goat,		
CAAGT	5593	AAGTGCCTTCAACGGCAAACCTGAAGTAACCTGGGTGGGGACCACCGATTGCT
Bharal,		
CAAGT	5593	AAGTGCCTTCAACGGCAAACCTGAAGTAACCTGGGTGGGGACCACCGATTGCT
Domestic_goat,		
CAAGT	5593	AAGTGCCTTCAACGGCAAACCTGAAGTAACCTGGGTGGGGACCACCGATTGCT
Measles		
CAATT	5615	AGGTGCTCTTAAACGGGAGGCCGAAGTCACGTGGTAGGCAGTATAGATTGCT
Rinderpest		
CAATT	5593	AAGTACTATTCAACGGGAGGCCGAGGTTACCTGGATAGGTAGTGTAGATTGCT
Phocine_distemper_north_sea		
TAAGT	5615	CTGTACTTTCAATGGAAGACCAGAACGTCACATGGGTGGGAGTGGTATTGTT
Phocine_distemper_caspian_sea,		
CAAGT	5593	CTGTGCTTTCAATGGCAGACCAGAACGTAACCTGGGTGGGAGTGGTATTGTT
Dog_canine_distemper		
CAAGT	5593	CTGTGCTTTCAATGGGAGACCAGAACGTAACCTGGGTGGGAGTGGTATTGTT
Ferret,		
CAAGT	5593	CTGTGCTTTCAATGGGAGACCAGAACGTAACCTGGGTGGGAGTGGTATTGTT
Porcine		
TAAGT	5593	GGGTCTGTTCAATGGTCGACCTGAAGTAACCTGGTAGGTAGTGTAGATTGTT
Phyllostomus		
CAAAT	5593	GTGTGCTGTTCAACGCCGTCTGAAGTGACTTGGGTGGGGAGTGGTATTGTT

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Hendra		ACATAATCAACAGAACAGCCGGTCGAACATCGGATTGGTACACTCAGATATGGA
ATCAG	5983	ATATCATAAATAGGACAGCGGGCGAAGTATAGGTCTTGTCCATTCTGACATGGA
Nipah		TTATATGTGAAGCAATTCTATTGGATCACTGGCCTGATACATTGTGATCTGA
GTCTG	5983	ATATTACATCCAAATTCAACCTGGATCTCTGGATTATCCATAGTGTATCGA
Niniventer		ACATCACTGCCAGATCCCGCCAGTTCTATTGCCTTATCCATTGTGATATCGA
ATCAG	5698	ATATTCTAGCCACATTGAGACCTCAAGCTGACATTGATACATAGTGTATATTGA
Berylmys		ATATCATTAGTAATATACCATCTCAAGTCTGGACTAATCCACTCAGATATCGA
AAGCA	5662	ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Gierle		ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
GAGTG	5686	ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Feline		ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
GTCCA	5729	ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Dolphin		ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
GACCT	5653	ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Saiga_antelope,		ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
GACGC	5653	ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Goitered_gazelle,		ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
GACGC	5653	ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Domestic_sheep,		ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
GACAC	5653	ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Wild_goat,		ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
GACAC	5653	ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Bharal,		ACATAATCAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
GACGC	5653	ACATAATTAGTAACATCCAAACCTCTAGCTGGTTCATACATTAGATATTGA
Domestic_goat,		TCATAGTCAGTAATATCCCTACCTCTAGTGTGGGGTTATCCATTAGATATAGA
GACAC	5653	ATATCATCAGCAATATACAGACATCTAGCCTGGCTAATACACTCAGACATAGA
Measles		
GACCT	5675	
Rinderpest		
AACCC	5653	

Phocine_distemper_north_sea	ATATACTTAGCCAAATACCTGCTAGCAGTCTAGGATTAATACACTCAGACATAGA
ATCAC 5675	
Phocine_distemper_caspian_sea,	ACATACTGAGCCAGATCTCTGCTAGCAGTCTGGGTTGATTCACTCGGATATAGA
GTCAC 5653	
Dog_canine_distemper	ACATACTGAGCCAGATCTCTGCTAGCAGTCTGGGTTGATTCACTCGGATATAGA
GTCAC 5653	
Ferret,	ACATACTGAGCCAGATCTCTGCTAGCAGTCTGGGTTGATTCACTCGGATATAGA
GTCAC 5653	
Porcine	ATATCTAACGCCAGATACTACCGGTAGTATAGCGGTATACACTCCGATATTGA
GAGCC 5653	
Phyllostomus	ATATATTGAGTCAAATACCTACAGGCAGCCTGTCGTTACATTGACATTGA
AAGTC 5653	

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Hendra	GCATAGACAAACAAGTGGAAAGAAATTATGATAGAGCATTACACCTTATCTCAAT
AGCAA 6043	
Nipah	GGATTGACAAAAATGTAGAGGAGATACTAGTAGAACATTCCATCTAATATCTAT
CGCGA 6043	
Niniventer	TGGATAGAAAATGATCCTATTAAAGTTCTGGAGGAGTTATGTCATGTCTCTCT
GTATA 5758	
Berylmys	CCAGTGAGAAAACAACCTACCGAAATTTTGAGGAATTAGTCATGTCGGTTGCCT
AAGTT 5722	
Gierle	TCCCTGAGAACGTAGAAGTTGAAGTGTGAGAACAAGTTCATGTCGGCTGTAT
CGCTA 5746	
Feline	GCTTAAGCAAGACGAAGAATAAAATTCTTGAGGAGCTGTGCCACATTCTGTCAAT
GGCAC 5789	
Dolphin	TACCAAATAAGGACCTAGTTGAAAAGCTGAAAGAATTAACTGCCATTGTCGAT
GACAT 5713	
Saiga_antelope,	TCCCAACCAAAGATGCTGTTGAGAAATTGGAGGAATTGCCTCTATCCTATCCTT
ATCCT 5713	
Goitered_gazelle,	TCCCAACCAAAGATGCTGTTGAGAAATTGGAGGAATTGCCTCTATCCTATCCTT
ATCCT 5713	
Domestic_sheep,	TCCCAACCAAAGACGCTGTTGAGAAATTGGAAGAATTGCCTCTATCCTATCCTT
ATCCT 5713	
Wild_goat,	TCCCAACCAAAGACGCTGTTGAGAAATTGGAAGAATTGCCTCTATCCTATCCTT
ATCCT 5713	
Bharal,	TCCCAACCAAAGATGCTGTTGAGAAATTAGAAGAATTGCCTCTATCCTATCCTT
ATCCT 5713	
Domestic_goat,	TCCCAACCAAAGATGCTGTTGAGAAATTGGAAGAATTGCCTCTATCCTATCCTT
ATCCT 5713	
Measles	TACCTAACCAAAGATACTATAGAGAAGCTAGAGGAATTGGCAGCCATCTTATCGAT
GGCTC 5735	
Rinderpest	TCCCTACAAAAGATATCACAGAGAAATTGGAAGAGTTGTCAGCTATCCTAGCGTT
GGCTC 5713	
Phocine_distemper_north_sea	TTCCCAACCAAAGATGCAATTGAAAAGTTAGAAGAACTGTCTGCCATCCTGTCTAT
GAATT 5735	
Phocine_distemper_caspian_sea,	TACCGGACAAAGACATAATCGAAAAGTTGGAGGAATTGTCTGCTATATTATCAAT
GAATT 5713	
Dog_canine_distemper	TACCGGATAAAAGACATAATTGAAAAGTTGGAAGAATTGTCTGCTATATTATCAAT
GAATT 5713	
Ferret,	TACCGGATAAAAGACATAATTGAAAAGTTGGAAGAATTGTCTGCTATATTATCAAT
GAATT 5713	
Porcine	TCCCTGACAAAGACGCTGTTGAGAAACTAGAAGAGCTTCTGCAATCTTATCGAC
GGCCC 5713	
Phyllostomus	TTCCCTGATAAAAGATATAGTAAAGTTAGAGGAATTGTCAGCAATATTATCAAC
AGCAC 5713	

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Hendra	TCAATGTAATGATAGAAGAGACGGTGTCTGTATCTAAATAGCATTGCACCAGG
GTTCC 6103	
Nipah	TAAATGTTATGATGGAGGACGGACTATTAGTATCCAAGATAGCATAACCCCTGG
ATTCC 6103	
Niniventer	CATTCCCTGGTGCAAGGAATTCTGCTCTGTGATTAAATTGTTACCAAGAAAAGCA
AGGTT 5818	
Berylmys	TATTATTAGGTGAACCTAAGTCATCGTTAGTTATGAAAATCATGCCAGACCTGG
TGATT 5782	

Gierle	TTCTCGTAGGTGAGGTGGTTCTCTGGTAATCAAGATGCAGCCAAAGCCAGG
TGACT 5806	TCATTTGGGAAAATCGGATCTTATTAGTTGTCAAGTTATTACCAAGGGTCGG
Feline	TTATTTAGGTAAAATAGGATCTCTCTAATAATCAAGATAATGCCGACAAGCGG
TGACT 5849	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
Dolphin	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
GGACT 5773	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
Saiga_antelope,	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
GGATT 5773	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
Goitered_gazelle,	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
GGATT 5773	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
Domestic_sheep,	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
GGATT 5773	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
Wild_goat,	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
GGATT 5773	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
Bharal,	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
GGATT 5773	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
Domestic_goat,	TGATTTGGGAAAATCGGCTCTATTACAGTTGTCAAATTATGCCATTAGCGG
GGATT 5773	TACTCCTGGCAAAATAGGATCAAAACTGGTGATTAAGCTATGCCCTTCAGCGG
Measles	TATTGCTAGGTAAGGTAGGTTAGTATTGGTTATCAAAGTAATGCCCTATAAGTGG
GGATT 5795	TGATTTGGGCAAGGTAGGATCAGTCTAGTAATTAAGATCATGCCAATGAGCGG
Rinderpest	TGATATTAGGGAAGGTAGGGTCAGTGTAGTAATTAAGATCATGCCAGTAGTGG
AGACT 5773	TGATATTAGGGAAGGTAGGGTCAGTGTAGTAATTAAGATCATGCCAGTTAGTGG
Phocine_distemper_north_sea	TGATATTAGGCAAGGTTGGCTCAGTTGATTATCAAGATAATGCCATTAGCGG
TGACT 5795	TAATCCTAGGCAAGGCCGGGTCAACCTGATTATCAAGATAATGCCATTAGCGG
Phocine_distemper_caspian_sea,	
CGACT 5773	
Dog_canine_distemper	
CGACT 5773	
Ferret,	
CGACT 5773	
Porcine	
GGACT 5773	
Phyllostomus	
AGATT 5773	

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Hendra	CCATATCCAGGCTACTGAATATGTATCGTCCTATTTGGTTAGTATTGGTGTG
TTTCC 6163	CAATCTCAAGATTATTTAACATGTACAGATCATTTGGACTAGTACTGGTGTG
Nipah	ATGTAACAACCTTCTAAATTCTAGAGAACATATTGAAGATCAAAGGATAGT
TTTCC 6163	ACACGTACTTGTGAGATTGATGAGGGAGCATTATGAAACATCAATGTTAAT
Niniventer	ACTCATACATCCTCTTAAGATTCTAGGGAACACTATCATAATGTATATATTAT
AATCC 5878	ATACGTATTCAAGGATTGATGAGGGTATGCCATCGGAATTCTATCAACAAAGCCTCCTG
Berylmys	TAGTTCAAGGATTGATGAGGGTATGCCATCGGAATTCTATCAACAAAGCCTCCTG
TTATC 5842	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Gierle	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
AATCC 5866	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Feline	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
TTTAC 5909	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Dolphin	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
ATACC 5833	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Saiga_antelope,	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
CTATC 5833	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Goitered_gazelle,	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
CTATC 5833	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Domestic_sheep,	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
CTATC 5833	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Wild_goat,	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
CTATC 5833	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Bharal,	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
CTATC 5833	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
Domestic_goat,	TTACCCAAGGCTTCATGCCATCCAATATTTAGGGAGAGCCTGCTTGC
CTATC 5833	TTGTTCAAGGGATTATAAGCTATGTAGGGTCTCATTATAGAGAAGTGAACCTGT
Measles	ATGTCCAGGGTTCATGAGTTATGTGGTGCCTTATTACAGAGAGGTACTCATCAT
CTACC 5855	GGGTTCAAGGTTTATACCTACACTCCACATTTCTCAGAGTTCATAGT
Rinderpest	
CTACC 5833	
Phocine_distemper_north_sea	

TTACC 5855	GGGTTCAAGGATTATTTATGCAC	TTCAAGGTTTCATAGT
Phocine_distemper_caspian_sea,	GGGTTCAAGGATTATTTGTATGCAC	TTCAAGGTTTCATAGT
TTACC 5833	GGGTTCAAGGATTATTTGTATGCAC	TTCAAGGTTTCATAGT
Dog_canine_distemper	GGGTTCAAGGATTATTTGTATGCAC	TTCAAGGTTTCATAGT
TTACC 5833	GGGTTACAGGGTTCAAAATTGCAC	TCGTGCATTATCTAAAGGGATAATAAT
Ferret,	GGGTTACAGGGTTCAAAATTGCAC	TCGTGCATTATCTAAAGGGATAATAAT
TTACC 5833	GGGTTACAGGGTTCAAAATTGCCCTCGTGCATTATCTAAAGGGATAATAAT	
Porcine	GGGTTACAGGGTTCAAAATTGCCCTCGTGCATTATCTAAAGGGATAATAAT	
TTACC 5833		
Phyllostomus		
TTACC 5833		

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Hendra	CAGTGTATAGTAATCCAGAGTCCACAGAAGTGTATCTCATCTGCTGCAGAAAAC	
AATTA 6223	CAGTATATAGTAATCCAGATTCTACTGAAGTATATCTCTTGCTACAGAAC	
Nipah	CTAGTTATAGCAATATTCATCAACAGAGTGTATGTTATGTACAGGTCTAA	
GGTCA 6223	CAGGATTAGCAACCCATCATCATCAGAGTGTATATTCTATTAGAGGACTAAG	
Niniventer	CAAGTTACAGCAACTTATCATCATCTGAGATTACATTCTATGCCGAGGTTAAG	
GGCCA 5938	CTAGGTTAGTAACATGTCATCATCTGAGGTTACTATAGGGATTACCTCAA	
Berylmys	CTAGATACTTATCTCCACTGAGTGTATCTAGTATTGTTGGGCTTAA	
GATGA 5902	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Gierle	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
GTCAA 5926	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Feline	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
TACAA 5969	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Dolphin	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
GTACA 5893	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Saiga_antelope,	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
GGCCA 5893	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Goitered_gazelle,	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
GGCCA 5893	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Domestic_sheep,	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
GGCCA 5893	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Wild_goat,	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
GGCCA 5893	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Bharal,	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
GGCCA 5893	CGAGATATAGTAACTTCATCTGACTGAGTGTACCTTATTATGATAGGATAAA	
Domestic_goat,	CTAGGTACAGCAACTTCATATCTACTGAATCTTATTAGTTATGACAGATCTAA	
GGCCA 5893	CGAGATATAGTAACTTCATCTCAACTGAGGCTATCTAGCCTGTTGGACTCAG	
Measles	CTAGATATAGCAATTGTATCCACAGAGGCATATCTCGTTTATAGGACTAAG	
AGCTA 5915	CAAGATACAGCAATTGTGTCAACAGAGGCCTACCTGTTTACTGGTCTTAG	
Rinderpest	CAAGATACAGCAATTGTGTCAACAGAGGCCTACCTGTTTACTGGTCTTAG	
GGCCA 5893	CAAGATACAGCAATTGTGTCAACAGAGGCCTACCTGTTTACTGGTCTTAG	
Phocine_distemper_north_sea	CGAGGTACAGTAATTATGTGTCAACTGAGGCTATTAGTATTCCAAGGAATGCG	
GGCAG 5915	CTAGATACAGCAACTATGTCTACTGAGTGTACTTAGTGTCCAGGGATGCG	
Phocine_distemper_caspian_sea,		
AGCAG 5893		
Dog_canine_distemper		
AGCAG 5893		
Ferret,		
AGCAG 5893		
Porcine		
AGCTA 5893		
Phyllostomus		
GGCCA 5893		

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Hendra	AGACCATAATTCCACCTCAAAAGTTCTGATCATTCTCATCTCAGTGTGAAAT	
CAATG 6283	AGACTATTGTCGGCAAAAGTCCTTGAGCACTCTAATTGCACGATGAAGT	
Nipah	ACATCAAATATAATCCTAATGTCTAACATCCAGACTATCTAATATTAGTTAGG	
CAATG 6283	ATAGATTGCTTAATCCTGTTCAAGTGGTAATAGACTGGTACAGCTAGGGCCAAT	
Niniventer	ACCGACTTCTAAACCTACTACTATTGTGTAGACTAGTCAGTATGGGAAGTT	
ATCTG 5998		
Berylmys		
ATGTA 5962		
Gierle		

AAGTA	5986	ATCGATTGATTGATCCTGATAGAATAGTACAATACATAGTTAGAAATTACAACC
Feline		ATAGATTAAATCAACCTGAAGGAATAAAACAACAACTACTAAATTGAGCATAAG
AACTC	6029	ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
Dolphin		ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
AACAT	5953	ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
Saiga_antelope,		ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
GACTG	5953	ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
Goitered_gazelle,		ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
GACTG	5953	ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
Domestic_sheep,		ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
GACTG	5953	ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
Wild_goat,		ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
GACTG	5953	ATCGACTGATAAAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
Bharal,		ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
GACTG	5953	ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
Domestic_goat,		ATCGATTAAATAACCCAGAAGCCATTAAGCAAAGCATAATCAGAGCGGGGTCAG
GACTG	5953	ACCGGCTAATGAATCCTGAAAAGATCAAGCAGCAGATAATTGAATCATCTGTGCG
Measles		ATAGACTGATAGATCCTGAAAGAATTAAACAACAGGTGATGGAATCGGGATCAG
GAATT	5975	GGAGATTAGTCATCCTGAGGGGATCAAGCAACAGATTATAAGGATTGGTATTG
Rinderpest		GGAGACTAGTCATCCGGAGGGGATTAAACAACAGATTTCGAGTCGGTATTG
AACTA	5953	GGAGACTAATCAATCCTGAGGGGATTAAACAACAGATTTCGAGTCGGTATTG
Phocine_distemper_north_sea		GGAGACTAGTCATCCTGAGGGGATTAAACAACAGATTTCGAGTCGGTATTG
AACTA	5975	Ferret,
Phocine_distemper_caspian_sea,		AACTT 5953
AACTT	5953	Porcine
Dog_canine_distemper		GACAA 5953
AACTT	5953	Phyllostomus
Ferret,		GACCA 5953
AACTT	5953	
Nipah		
CCACG	6343	
Niniventer		
GAC--	6056	
Berylmys		
TGC--	6020	
Gierle		
CAT--	6044	
Feline		
AAA--	6087	
Dolphin		
CCT--	6011	
Saiga_antelope,		
TTT--	6011	
Goitered_gazelle,		
TTT--	6011	
Domestic_sheep,		
TTT--	6011	
Wild_goat,		
TTT--	6011	
Bharal,		
TTT--	6011	
Domestic_goat,		
TTT--	6011	
Measles		
AAT--	6033	
Rinderpest		
CCA--	6011	
Phocine_distemper_north_sea		
ATT--	6033	

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Hendra		ATCAAGGTATTACATCTGTTATTTCAGATCAAAACATTCAATCAAAACAATT
CCATG	6343	ACCAGGGAATAACATCAGTGATTTAAAATCAAGAATTCAAGCTACAGTCTAACAGTT
Nipah		ATGCAACATTATTGTCAATAATCCTGAGGAGAAAGTCAAATCAAATGTACTCAC
CCACG	6343	GTCAACAACTCTACACTATGATTCTGGATATAAAATCCAACACAGTATCATCAC
Niniventer		GTTCCCAGCTTATTGCTCATAGATATCAAGTCCCAGCATAATGTGATGTC
GAC--	6056	CAGTTACATTTGCTATATTTGAAACTAAGTATAGAAATAATGGTAC
Berylmys		CACCGGGATTGTAGCACATTGTTATCTATGAAGCAAGCAAACACCTACAATC
TGC--	6020	CACCAGGACTTGTGAGCCATGTATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Gierle		CACCAGGACTTGTGAGCCATATATTATCAGGGAAACAGAAAAGGTTGATTCAATC
CAT--	6044	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Feline		CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
AAA--	6087	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Dolphin		CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
CCT--	6011	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Saiga_antelope,		CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
TTT--	6011	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Goitered_gazelle,		CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
TTT--	6011	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Domestic_sheep,		CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
TTT--	6011	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Wild_goat,		CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
TTT--	6011	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Bharal,		CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
TTT--	6011	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Domestic_goat,		CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
TTT--	6011	CACCAGGACTTGTGAGCCATATATTATCAGAGAAACAGAAAAGGTTGATTCAATC
Measles		CACCTGGACTTATAGTCACATCCTATCCATTAAGCAACTAAGCTGCATAACAAG
AAT--	6033	TCCCCGGTTAGTCGGACATATATTATCCATCAAGCAGCTCAATTGCATAACAAG
Rinderpest		CACCTGGGTTAGTTGGCATATCCTATCAACAAAGCAGACAACATGTATTCAATC
CCA--	6011	
Phocine_distemper_north_sea		
ATT--	6033	

Phocine_distemper_caspian_sea,	CACCTGGGTGGTAGGGCACATCCTTCATCAAAGCAGGCAGCATGTGTGCAGTC
TTT-- 6011	CACCCGGGTGGTAGGGCACATCCTTCATCAAAGCAGACAGCATGTGTGCAGTC
Dog_canine_distemper	CACCCGGGTGGTAGGGCACATCCTTCATCAAAGCAGACAGCATGTGTGCAGTC
TTT-- 6011	CACCCGGGTGGTAGGGCACATCCTTCATCAAAGCAGACAGCATGTGTGCAGTC
Ferret,	CACCTGGATTGGTATGTCATATCCTCTCCAGAAAACAAGACACGTGTGTCCAAGC
TTT-- 6011	CACCTGGATTGGTATGTCATATGTCACATCCTGCCGAAAACAAACACATGTATCCAGTC
Porcine	CACCTGGATTGGTATGTCATATGTCACATCCTGCCGAAAACAAACACATGTATCCAGTC
CTA-- 6011	CACCTGGATTGGTATGTCATATGTCACATCCTGCCGAAAACAAACACATGTATCCAGTC
Phyllostomus	CACCTGGATTGGTATGTCACATCCTGCCGAAAACAAACACATGTATCCAGTC
ATG-- 6011	CACCTGGATTGGTATGTCACATCCTGCCGAAAACAAACACATGTATCCAGTC

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Hendra	AAGATCTAGTGAAACACTATCAGTCGAACAACCGTTTTGTTCTAGTCATAT
CACAT 6403	ATGATCTAAAGAAGTACTATCAGATTGACCAACCTTTTGTACCAACTAAAAT
Nipah	----TATTGGGTACCCCTTATTGCTGGACGACCGAACAGTTACCTAAAAGATT
CACTA 6403	----TTGTGGACCTCCATATATAAAAGGTATAAGAATTCTTACTTATCAAAAGT
Niniventer	----ATGTGGGCCTCCAATGATCAGAGGCTACCCAAATACATACTTGTCTAAAAT
AACTG 6112	----TTATGGACTGTGCTTGTACAGGGACACAAAAGTGATTACCTGTACATCAAT
Berylmys	----TATTGGACTCCCTGTTAGAAAGGATTCTTAATAGAGTGTGAGTGGTT
TACAG 6076	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Gierle	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
TACTA 6100	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Feline	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
TACAA 6143	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Dolphin	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
GACCC 6067	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Saiga_antelope,	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
AACCT 6067	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Goitered_gazelle,	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
AACCT 6067	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Domestic_sheep,	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
AACCC 6067	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Wild_goat,	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
AACCC 6067	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Bharal,	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
GACCC 6067	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Domestic_goat,	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
AACCC 6067	----CTTGGGTGATCCTTATATCCAAGGAGACTTCATAAGCACCTTAAATCTCT
Measles	----TGTGGGAGGCCAGTTAGTAGAGGTGATATCAACCTTATTCTGAAAAAAACT
TACAC 6089	----GGCGGGGCCAGCTACTAGAGGTGAGATAAACCGATATTAAGAAAGCT
Rinderpest	----ACATGGGCCTCTTACAATAGATCTGAACCTTACCTAACAGCTTAAATCTCT
CACAC 6067	----GCACGGACCTCCATTTCATGCTGAATCCTCAATCCTCACCTCAGGGTTT
Phocine_distemper_north_sea	----GCATGGACCTCCATTTCATGCTAAATCTTCAATCCTCACCTCAGGGTTT
GACGT 6089	----GCATGGACCTCCATTTCATGCTAAATCTTCAATCCTCACCTCAGGGTTT
Phocine_distemper_caspian_sea,	----CATGGGAGTACCGTTACCAACGAAGGGTTCAATCTAATCTGAGGTCCCT
AACAA 6067	----TCTAGGTTCCCCTATCACAAATGAGGGATTAAACATTAATTAAAATCACT
Dog_canine_distemper	
AACAA 6067	
Ferret,	
AACAA 6067	
Porcine	
AACAC 6067	
Phyllostomus	
TACCC 6067	

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Hendra	GTGATGAAAAGTTGCTTATGCAGGCTGGTTGAAAATGAACGGACCAGAAATCTT
GAAGA 6463	GTGATGAACAAGTACTTCTCAAGCAGGGCTGAAACTCAATGGGCCAGAAATTCT
Nipah	ATATTGATAAAACTCTGATTGACAGCAGGGCTGAGTTCAATGGGATTAAGTCTGT
TAAGA 6463	ATATTGAAAAGTATCTGATGAAGGCAGGATTGAAATTAAATGGACCCAAGTGCTT
Niniventer	GTGCAGAGAAATATCTACTTGCTACAGGGTTAACGCCAAATGTGCTT
CAAAA 6172	
Berylmys	
AAAGA 6136	
Gierle	
GAAAA 6160	

Feline		AAATAGAGAACGTTCTCTGTATGGGTTAGAATTGAATGGACCTAAGATTAT
ACAGC	6203	CGATTGAAAAAGTTCTTATTAATTGCGGGTTAACTGTGAACGGGCCAAGGTATG
Dolphin		CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCATAAAATCTG
TAAGA	6127	CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCATAAAATCTG
Saiga_antelope,		CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCATAAAATCTG
TAGAG	6127	CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
Goitered_gazelle,		CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
TAGAG	6127	CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
Domestic_sheep,		CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
TAGAG	6127	CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
Wild_goat,		CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
TAGAG	6127	CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
Bharal,		CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
TAGAG	6127	CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
Domestic_goat,		CTATTGAGAAAATCCTGGTAAATTGTGGTCTCTCGATCAATGGCACA AAAATCTG
TAGAG	6127	CTATAGAGCAGGTGCTGATCAGTTGCGGGTGGCAATTAAACGGACCTAAACTGTG
Measles		CTATCGAGCGTATTCTGATCAGCTGCGGGCTTACCATCACGGCACAAAGATTG
CAAAG	6149	GCATAGAGAAAGTGTAAATCAATTGTGGCTTACAATTAAATGGCTAAAGGTGTG
Rinderpest		GTATTGAGAAGGTATTAATCAATTGTGGCTTACAATTAAATGGTCTTAAGGTATG
CAGTG	6127	GTATTGAGAAGGTATTAATCAATTGTGGCTTACAATTAAATGGTCTTAAGGTATG
Phocine_distemper_north_sea		GTATTGAGAAGGTATTAATCAATTGTGGCTTACAATTAAATGGTCTTAAGGTATG
CAAGA	6149	GTATTGAGAAGGTATTAATCAATTGTGGCTTACAATTAAATGGTCTTAAGGTATG
Phocine_distemper_caspian_sea,		CTATTGAGAAAAGTCTGGTAACTGTGGTTTCTGTCAATGGAGACAAGGTCTG
TAAGA	6127	ATGTAGAGAAATTGCTAGTTAATGCGGCTCTCCATCAATGGAGACAAGGTATG
Dog_canine_distemper		*** * * * * * * *
TAAGA	6127	
Ferret,		
TAAGA	6127	
Porcine		
TCGCA	6127	
Phyllostomus		
TCGGA	6127	

Hendra		ATGAAGTGGGATATGATATAGGATCAGATATCAATACACTCAGGAGCACTATTAT
TATCT	6523	GTGAAATCAGTTATGATATCGGTTAGATATCAATACATTAAAGAGACACCATCAT
Nipah		AGATTGGTCATTATGATATTCAAAAGAACAGGACTTAAATCAAGTATAAT
AATTA	6523	AATTAGGAAATTGACTTAACTAATATCCAATCCACAAGCCCTATAATCAA
Niniventer		AGATTGGCAATTTCGACGAAGCGAATATCACCACAACTGTAATCTCATCAATCAA
ATCTT	6232	AATTATCAGGACATGACTATGCTAATGGGAGACTAGTCTAGAATCAAGTATAAT
Berylmys		ACTTAGTACATCATGATATCGCGTCTGGATCAGAGGGTCTGTCAACTCAACTGT
AAGTC	6196	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGCCTTATGAGCTCTACAAT
Gierle		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGCCTTATGAGCTCTACAAT
AGGGT	6220	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
Feline		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
GATAT	6263	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
Dolphin		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
TATTT	6187	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
Saiga_antelope,		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
TATTT	6187	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
Goitered_gazelle,		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
TATTT	6187	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
Domestic_sheep,		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
TATTT	6187	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
Wild_goat,		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
TATTT	6187	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
Bharal,		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
TATTT	6187	ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
Domestic_goat,		ATCTAATCCACCATGATATGCCTCCGGTCCAGACGGTCTTATGAGCTCTACAAT
TATTT	6187	AATTAATCCACCATGATGTGCCTCAGGGCAAGATGGATTGCTTAACTCTATACT
Measles		ATGTAGTCCACCATGATATCATCAGGGCCGGACGGTCTGCTTAATTCTTCTAT
CATCC	6209	ATCTGTTCCATCATGACATCTCATCAGGTGAAGAAGGGCTAAAGGTTCAATTAT
Rinderpest		ACCTGCTTACCATGATATTCGTCAGGCAGGAAGGGCTGAAAGGATCTATCAC
CATTC	6187	
Phocine_distemper_north_sea		
AATTC	6209	
Phocine_distemper_caspian_sea,		

GATCC	6187	ACCTGCTTCACCATGATATTCGTCAGGCAGGAAGGGCTGAAAGGATCTATCAC
Dog_canine_distemper		
GATCC	6187	ACCTGCTTCACCATGATATTCGTCAGGCAGGAAGGGCTGAAAGGATCTATCAC
Ferret,		
GATCC	6187	CTCTGCTACATCATGATATAGTGTCAAGGGTGCAGGGTTAACAAATGCAGTGAT
Porcine		
AATCC	6187	GTCTGCTACACCAGACGTAATCTCTGGCTGTGACGGTTAACAAATGCTATTAT
Phyllostomus		
TATTC	6187	

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Hendra		TACTTAATGAAGCTATGAACTATTTGACGATGAGAGGAGTCCTTCTCATCATCT
AGAGC	6583	TGTTAAATGAGGCTATGAATTATTTGATGACAACAGATCACCTCACACCACCT
Nipah		TATGTAAGGAATTATTAATTACGATTGATCCGGCCAGAGTAATGGCAGTCATT
AGAAC	6583	TTTTAAAGAATTAGCAGTTATGATTGACCTACTAGAAACATTCAATCCATT
Niniventer		TGTTAAAGAGCTGGCAGTTCTGCTAGATCCTACTCGAAGTCAGAATTCAATATT
TCAAC	6292	TAGTTAGAGAATATCTTAATGCAACTATACAAGGCCGGAACATTAGGCTT
Berylmys		TATACAAAGAATTGGCAAGGTTAAGGAAAACACAAGGAGTCACAAAGGCATGTT
CCAGC	6256	TATATAGGAATTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Gierle		TATATAGGAATTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
CCAAC	6280	TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Feline		TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
TTCAC	6323	TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Dolphin		TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
TCACG	6247	TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Saiga_antelope,		TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
CCACC	6247	TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Goitered_gazelle,		TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
CCACC	6247	TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Domestic_sheep,		TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
CCACC	6247	TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Wild_goat,		TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
CCACC	6247	TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Bharal,		TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
CCACC	6247	TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
Domestic_goat,		TATATAGGGAGTTGGCTATTCAAAGATAATATAAGGAGTCAGCACGGAATGTT
CCACC	6247	TCTACAGGGAGTTGGCAAGATTCAAAGACAACAAAGAAGTCACAAAGGGATGTT
Measles		TGCTCAAGGAGTTGGCCAGATTAGGATAATCAAAGGAGTCAGCACGGATGTT
CCACG	6269	TTTATAGGGAGCTTGACGGTTCAAAGATAATTATCAGACTTCGATGGATGTT
Rinderpest		TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
CCATG	6247	TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
Phocene_distemper_north_sea		TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
CCACG	6269	TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
Phocene_distemper_caspian_sea,		TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
CCATG	6247	TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
Dog_canine_distemper		TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
CCATG	6247	TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
Ferret,		TTTACCGGAACTCGCAAGGTTCAAAGATAACCACCAATCTCACATGGAATGTT
CCATG	6247	TATATCGAGAGCTGGCAAGGTTAAGGAAATCCATACGACATCCCATGGATCTT
Porcine		TGTATAAAGAACTAGCAAGGTTCAAGAGAGATCCATCTCACCTCACATGGTATT
TCATG	6247	
Phyllostomus		
CCATG	6247	

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Hendra		CCTTCCAGTCCTAGAGAAAACGAGAGTCAAAATCATGGGAGAGTCACGAG
AAAAG	6643	CCTATCCAGTTGGAGAGAACTAGAATTAAACAATAATGAATTGTGTGACTAA
Nipah		CATATCCAATTCTAGAAATGTCTAGAGTCAGGGAACTTGTACGCCATAGCGGT
AAAAG	6643	ATTATCCTGTACTTATGAAGTCCCGTGTGAGAGAACAAATGACTCAGATTGCAA
Niniventer		ATTATCCTGTCTGTACAAGAGCAGAATTAGAGAGCATATGAGTCAAATTGCCAA
TAAAC	6352	CTTACCCAGTCTTACATGAGAGTCAGTTAAGAGAAATTAAAGTGTATTGCATT
Berylmys		
AAAGG	6316	
Gierle		
GAAAAA	6340	
Feline		

GAAAT	6383	CTTATCCGGTTCTGCAGATAGTAGGCAAAGAGAATTAGTATCCAGAATCGCTAG
Dolphin		
GAAGT	6307	CCTACCCGGTACTGGCAACAGCAGGCAACGTGAATTAACTCTCGAATAGCAA
Saiga_antelope,		
GAAAT	6307	CCTACCCGGTACTGGCAACAGCAGGCAACGTGAATTAACTCTCGAATAGCAA
Goitered_gazelle,		
GAAAT	6307	CCTACCCAGTACTGGCAACAGCAGGCAACGTGAATTAACTCTCGAATAGCAA
Domestic_sheep,		
GAAAT	6307	CCTACCCAGTACTGGCAACAGCAGGCAACGTGAATTAACTCTCGAATAGCAA
Wild_goat,		
GAAAT	6307	CCTACCCAGTACTGGCAACAGCAGGCAACGTGAATTAACTCTCGAATAGCAA
Bharal,		
GAAAT	6307	CCTACCCAGTACTGGCAACAGCAGGCAACGTGAATTAACTCTCGAATAGCAA
Domestic_goat,		
GAAAT	6307	CCTACCCAGTGTGGCAACAGCAGGCAACGTGAATTAACTCTCGAATAGCAA
Measles		
CAAAT	6329	CTTACCCCGTATTGGTAAGTAGTAGGCAACGAGAACTTGTATCTAGGATCACTG
Rinderpest		
AAAGT	6307	CTTACCCCGTTCTGCTGAGCAGCAGGCAACGTGAACTGATCTCCAGGGTTGCTAG
Phocine_distemper_north_sea		
GAAAT	6329	CCTACCCAGTGCTAGCGACAAGCCAGGAACGGGAACTTGTGTCTATAATAGCTAG
Phocine_distemper_caspian_sea,		
GAAGT	6307	CATACCCCTGTGTTAATCGCAAGTCAGGAAAGGGAGCTCGTATCTATCATTGCAA
Dog_canine_distemper		
GAAGT	6307	CATACCCCTGTGTTAATCGCAAGTAAGGAAAGGGAGCTCGTATCTATCATTGCAA
Ferret,		
GAAGT	6307	CATACCCAGTGCTAATTGAGAGTCAACAGCGGGAGTTAACTAGATATCACAG
Porcine		
AAAGA	6307	CTTATCCCGTCTTGATTGAGAGCCAGCAACGAGAAATTGATCCTGATATCACCG
Phyllostomus		
AAAAA	6307	

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Hendra		TAACGTATTCTCTTATAAAGTTGAAGGAAACTAAAAGCCCGAACCTTATAA
CATCA	6703	TGATTGTCTACTCACTTATCAAGTTCAAGGACACCAAAAGCTCAGAACCTTATCA
Nipah		ACTTCTGTATATACTCTTTATGATAAAATCCA-----CAAGCAATCCAGAA
CATCA	6703	TGTCATTATTTGTCTTTCTATTGATGATGAA-----GCTATAACCGAGA
Niniventer		TGTCATATATAACCTATTGCTCTAGGTCTCCA-----GATGTATGTAGATC
AATAC	6406	ATGTTGTATATCTACTCTTTATTCAAGCTCTACA-----TTATCTAGAAACA
Berylmys		ATTGGGGTATATTACTGTATTCAACAGAACAG-----GGGGCGCTCAATCA
TTTAG	6370	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Gierle		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
AACCA	6394	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Feline		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
AATAA	6437	TCTGGGGTATATTACTGTATTCAACAGAACAG-----GGGGCGCTCAATCA
Dolphin		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
ATTGG	6361	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Saiga_antelope,		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
AACAA	6361	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Goitered_gazelle,		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
AACAA	6361	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Domestic_sheep,		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
AACAA	6361	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Wild_goat,		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
AACAA	6361	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Bharal,		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
AACAA	6361	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Domestic_goat,		TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
AACAA	6361	TCTGGGGTATGTCTGCTATATTCTGATGACCGG-----GCACTAACGACA
Measles		TTTGGGGCATATTCTCTTACTCCGGAACAGA-----AAGTGATAAACG
GTTA	6383	TTTGGGGTACATTCTCTTACTCCAGCGATAGG-----AGACTACTAAGTAG
Rinderpest		ATTGTGGCTATATTGCTCTATTCAAGAACATT-----TATGAATTATCTAA
GCTGG	6361	ACTGTGGCTATATTGCTTTACTCGGGAGACTTA-----TACGAAATTACCA
Phocine_distemper_north_sea		
GATTG	6383	
Phocine_distemper_caspian_sea,		
GATTG	6361	

Dog_canine_distemper	ACTGTGGCTATATTTGCTGTACTCGGGCGACTTA-----TACGAAATTACCAAG
GATTG 6361	
Ferret,	ACTGTGGCTATATTTGCTTACTCGGGAGACTTA-----TACGAAATTACCAAG
GATTG 6361	
Porcine	TAACCGGCCATATTATCCTGTACTCTAGTAATCTC-----ACTGACATTGCTCA
AGTAA 6361	
Phyllostomus	TTGTCGGGCATTCTATCCTGTATTCTAGAAACCTG-----ATCACACTTATCCA
AGTGA 6361	

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Hendra	AAAATTACATAAGGAGAAAAGTTTGATTCTAGACTTCAGATCCCATACTATGAT
TAAAC 6763	
Nipah	AAAATAACATCAGAAGAAAAGTTCTAATCTAGATTCAGATCGAAGCTCATGAC
AAAGA 6763	
Niniventer	TGAGGGATTAAAACAAGGGTTGTTGATTATGGATATTACAAATAACTTTAGA
AAGAT 6466	
Berylmys	TTTCAAACCTCAAAAAAGGGTAATTATATTGGATATTGATAATAGATATATTCA
GGATT 6430	
Gierle	TAAATGATCTCAGAAGGGGAGTGATTGATTAGACATGGATCATTACGCAGTTAC
AGGGC 6454	
Feline	TGAGTAATCTTAGAAAGGAATTGATGTATGAGAGATGAATTTTCAT
ATCAA 6497	
Dolphin	TAAGAAATCTAAAGCGGGCTACTTATTATTGATGTTCATCACAAATTCTCGT
CAAGA 6421	
Saiga_antelope,	TCAAGAACTTGAAACGGAATCATCTAACCTTGACTTACATAGTAACCCATTAT
TAAAG 6421	
Goitered_gazelle,	TCAAGAACTTGAAACGGAATCATCTAACCTTGACTTACATAGTAACCCATTAT
TAAAG 6421	
Domestic_sheep,	TCAAGAACTTGAAACGGAATCATCTAACCTTGACTTACATAGTAACCGTTAT
TAAAG 6421	
Wild_goat,	TCAAGAACTTGAAACGGAATCATCTAACCTTGACTTACATAGTAACCGTTAT
TAAAG 6421	
Bharal,	TCAAGAACTTGAAACGGAATCATCTAACCTTGACTTACATAGTAACCGTTAT
TAAAG 6421	
Domestic_goat,	TCAAGAACTTGAAACGGAATCATCTAACCTTGACTTACATAGTAACCGTTAT
TAAAG 6421	
Measles	TCCAGAATCTCAAGTCCGGTTATCTAGTACTAGACTTACACCAGAATATCTCGT
TAAGA 6443	
Rinderpest	TGAGTAATCTCAAGTCTGGATACCTTTGTTGATCTTCATCAGAACTTGTTCAT
GAAAA 6421	
Phocine_distemper_north_sea	TACGAAATCTGAAATCTAATCATATAATATTGATTTACATCATAATCTGTTAT
GGAGA 6443	
Phocine_distemper_caspian_sea,	TCCGAAACCTGAAAGCCAACCACATAATTCGACTTCATCGTAACTTATTAT
GGATA 6421	
Dog_canine_distemper	TCCGAAACCTGAAAGCCAACCACATAATTCGACCTGCATCGTAATTATTAT
GGATA 6421	
Ferret,	TCCGAAACCTGAAAGCCAACCACATAATTCGACCTGCATCGTAATTATTAT
GGATA 6421	
Porcine	TCAAGAACCTCAAATCCGGATATTAACGATTGATCTATTCCAAAACCAATT
GAGAA 6421	
Phyllostomus	TCAGGAACCTAAAATCCGGTATATTACGATTGATCTTATCAAACCAATT
TCAGA 6421	

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Hendra	TGCTACCTAAAGGAATGAAAGAGAGAAGAGAGAAAAGCGGATTCAAAGAAATTG
GATAT 6823	
Nipah	CTCTACCTAAAGGGATGCAAGAGAGAAGAGAAAAAAACGGTTCAAAGAAGTTG
GATAG 6823	
Niniventer	ACCTACCTCCATTTTATATAAAAGTTGGCAATTAAAGATTCCAAGAAGATCATG
GATGT 6526	
Berylmys	TAATCCCTAATTTATTAAGAAAGTTATTTGCAAAATTAGGACAGAAGGTTG
GATAG 6490	
Gierle	TCATCCCACGATTATTAGAAAGATCATTAACCTCTCTAGGACAAAAAGTCTG
GATTA 6514	
Feline	GATTGTCAGCAAATTACAAGAAAAGGTGATGTCACAAGAAGTCAAAACCTG
GATCT 6557	

Dolphin		ATCTTCCAAATCCGAAAGGGCTTAATACGGACTCTTATCCCACGGAGAGAGTG
GTTAT	6481	GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
Saiga_antelope,		GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
GTTGT	6481	GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
Goitered_gazelle,		GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
GTTGT	6481	GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
Domestic_sheep,		GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
GTTGT	6481	GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
Wild_goat,		GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
GTTGT	6481	GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
Bharal,		GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
GTTGT	6481	GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
Domestic_goat,		GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
GTTGT	6481	GGCTATCCAAGGCTGAGAAACTGCTGGTGCGGACGAGTCACTAAGAAGAGAATG
Measles		ATCTATCCAAGTCAGAGAACAGATTATTATGACGGGGGTTAAAACGTGAGTG
GGTTT	6503	ACCTGTCAAAGTCTGAGAACAGCTGATCAGAACAGGAGGGCTCAAGCGTGAGTG
Rinderpest		ACCTGTCAAAGTCTGAGAACAGCTGATCAGAACAGGAGGGCTCAAGCGTGAGTG
GCTTT	6481	ACCTGTCAAAGTCTGAGAACAGCTGATCAGAACAGGAGGGCTCAAGCGTGAGTG
Phocine_distemper_north_sea		ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
GTTAT	6503	ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
Phocine_distemper_caspian_sea,		ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
GCTCT	6481	ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
Dog_canine_distemper		ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
GCTCT	6481	ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
Ferret,		ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
GCTCT	6481	ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
Porcine		ACATCTCCAGATCTGACAGGTCTCTCATCTAACGACAATCCCCAAAAAGAATTG
GGTGT	6481	ACATCTCTAAAGTCTGACCGGGCATTAATCAGGGCAACTATCGCCCGTCGGGATTG
Phyllostomus		ACATCTCTAAAGTCTGACCGGGCATTAATCAGGGCAACTATCGCCCGTCGGGATTG
GATGT	6481	ACATCTCTAAAGTCTGACCGGGCATTAATCAGGGCAACTATCGCCCGTCGGGATTG

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Hendra TTGACTTATCTAATAGGGAAGTCAAAATCTGGTGGAAAGATCATAGGTTACCTCTC
TTTAG 6883 TAGAGTTATCGAATCGAGAAGTAAAATCTGGTGGAAAGATAATCGGATACATATC
Nipah TTACACTAGATGCTGCGGCATGTAAAGATTAAAGTAGTAAAGTAGTAAAGTAGGATCCTCTAG
TATTA 6883 CCTCA 6586 TTACACTAGATGCTGCGGCATGTAAAGATTAAAGTAGTAAAGTAGGATCCTCTAG
Niniventer TGCACCTAACCACTGCTGAGATCAAGGAATGTTAAAGATAACTGGGTACTCGAT
CCTCA 6586 Berylmys CCAGGTTAGAAACGTCAAGAGATCAAAGAATTCTTAAGGTGATAGGCTATGCTAT
GATTT 6550 Gierle TTAATCTTGATACTCCGACACGAAAAGCATTATATAAGTTAGTAGGTTATTCTATT
GATCT 6574 Feline TTAAGCTTGAGACAAGTGAGATAAAGGAGTGGTTAAAGTTGATAGGTTACGGTGC
AATAA 6617 Dolphin TCACTCTCGAAACGAAAGAAGTAAAAGAGTGGTCAAATTGGTAGGTTACAGTGC
ACTCA 6541 Saiga_antelope, TCACTCTCGAAACGAAAGAAGTAAAAGAGTGGTCAAATTGGTAGGTTACAGTGC
ACTCA 6541 Goitered_gazelle, TCACTCTCGAAACGAAAGAAGTAAAAGAGTGGTCAAATTGGTAGGTTACAGTGC
ACTCA 6541 Domestic_sheep, TCACCCCTCGATACGAAAGAAGTGAAAGAGTGGTCAAATTGGTAGGTTACAGTGC
ACTCA 6541 Wild_goat, TCACTCTCGATACGAAAGAAGTGAAAGAGTGGTCAAATTGGTAGGTTACAGTGC
ACTCA 6541 Bharal, TCACTCTCGATACGAAAGAAGTGAAAGAGTGGTCAAATTGGTAGGTTACAGTGC
ACTCA 6541 Domestic_goat, TCACTCTCGATACGAAAGAAGTGAAAGAGTGGTCAAATTGGTAGGTTACAGTGC
ACTCA 6541 Measles TTAAGGTAACAGTCAAGGAGACAAAGAATGGTACAAGTTAGTCGGATACAGCGC
TCTGA 6563 Rinderpest TTAAACTCACTACGAAAGAGATCAAAGAGTGGTCAAAGCTAATAGGTTACAGTGC
ACTCA 6541 Phocine_distemper_north_sea TTCAATTGGAGACTAAAGAAATTAGGAATGGTCAAATTGCTAGGTTATAGTGC
ACTGA 6563 Phocine_distemper_caspian_sea, TTCAGCTTGAGACAAAAGAGATAAAGGAGTGGTCAAATTGTTAGGTTATAGTGC
ACTGA 6541 Dog_canine_distemper TTCAGCTCGAGACAAAAGAGATAAAGGAGTGGTCAAATTATTAGGTTATAGTGC

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ACTGA	6541	TTCAGCTCGAGACAAAGAGATAAAGGAGTGGTTCAAATTATTAGGTTATAGTGC
Ferret,		TTCACCTTGAGACAAAGAAATCAAAGAGTGGTTAAATTAGTGGGGTATAGTGC
ACTGA	6541	TTCGTTAGAACCAAGGAAATCAAGGAGTGGTTAAACTAGTCGGGTACAGTGC
Porcine		*
TCTGA	6541	**
Phyllostomus		*
CCTTA	6541	**
		*
Hendra		TCTGAATCGAACTACCACACCCA-----
-----	6906	
Nipah		TCTGATTTAACCTTCAAATCCA-----
-----	6906	
Niniventer		TTTAA-----
-----	6591	
Berylmys		ATAATCTGTAA-----
-----	6561	
Gierle		ACCTCTAG-----
-----	6582	
Feline		TTAATCATGTATGATGATAGAGTATGATTATCCATC---TTTAAAAGAGTAAGAT
AATAT	6674	
Dolphin		TCAGAGAGTAA-----
-----	6552	
Saiga_antelope,		TCAGAGGCTAG-----
-----	6552	
Goitered_gazelle,		TCAGAGGCTAG-----
-----	6552	
Domestic_sheep,		TCAGAGGCTAG-----
-----	6552	
Wild_goat,		TTAGAGGCTAG-----
-----	6552	
Bharal,		TCAGAGGCTAG-----
-----	6552	
Domestic_goat,		TCAGAGGCTAG-----
-----	6552	
Measles		TTAAGGATTAATTGGTGAACCTCCGGAACCTAATCCTGCCCTAGGTAGTTAGGC
ATTAT	6623	
Rinderpest		TTCGGGAGTGA-----
-----	6552	
Phocine_distemper_north_sea		TTAGAAATTCTAGTAAGCTAACCGGCCTCCTCCACCCCTCTTGATCTCTGT
GCGAT	6623	
Phocine_distemper_caspian_sea,		TTAGAAATCACTAA-----
-----	6555	
Dog_canine_distemper		TTAGAAATCACTGA-----
-----	6555	
Ferret,		TTAGAAATCACTGA-----
-----	6555	
Porcine		TTCGAGAGTGA-----
-----	6552	
Phyllostomus		TCAGTGAATGA-----
-----	6552	

Hendra		-----TCACCAATGAAGCCCCGA-----	ACAAGTCTACATAG
ATCAG	6942		
Nipah		-----AGACCAACTGATAACTT-----	ATGTTGATCTAAGG
TTCAG	6942		
Niniventer		-----	-----
-----	6591	-----	-----
Berylmys		-----	-----
-----	6561	-----	-----
Gierle		-----	-----
-----	6582		
Feline		CAGATGTATGATAACCAATTAAGTATTACTTTGAATTGAAAGGTTGCTCAATT	
CACGC	6734		
Dolphin		-----	-----

Hendra	TTATTAAGA-----	AAAA	695
5			
Nipah	TTATTAAGA-----	AAAA	695
5			
Niniventer	-----		659
1			
Berylmys	-----		656
1			
Gierle	-----		658
2			
Feline	TTTTTAGTAATCGGGTTTTATTCCAATTAGGGCAATTAGAAAAAA		678
1			
Dolphin	-----		655
2			
Saiga_antelope,	-----		655
2			
Goitered_gazelle,	-----		655
2			
Domestic_sheep,	-----		655
2			
Wild_goat,	-----		655
2			
Bharal,	-----		655
2			
Domestic_goat,	-----		655
2			
Measles	-----		664
3			
Rinderpest	-----		655
2			
Phocine_distemper_north_sea	-----		664
2			
Phocine_distemper_caspian_sea,	-----		655
5			
Dog_canine_distemper	-----		655
5			

Ferret,	-----	655
5	-----	
Porcine	-----	655
2	-----	
Phyllostomus	-----	655
2	-----	