

Additional file 2 Primers used for detection and full-length genome amplification of P-PARV4 and O-PARV4 in different hosts.

Primers	Sequences	Binding position ^a	Length ^b	Function ^c	Reference
PARV4-F	5'-GGACYTCTATGYTRGCTGAYCG-3'	3404-4043(EU200676)	640	PARV4 detection in domestic pigs, Tibetan pigs, ovine and Tibetan sheep.	EU200676 and JF504700
PARV4-R	5'-TKATCKACMCCWGTTCATGATMGC-3'	3518-4157(JF504700)			
P-PAPV4-F1	5'-CCTATAAGAATCAGTGTTCAGTTCC-3'	64-1529	1466	Amplify full-length P-PARV4 genomes in domestic pigs and Tibetan pigs	EU200676
P-PAPV4-R1	5'-CTCAGATCTCTTTCTGGCAACG-3'				
P-PAPV4-F2	5'-CCTACAGACAAGAATAACTATG-3'	1449-3304	1856		
P-PAPV4-R2	5'-CAGCCATGATTGTAGCAGGATCA-3'				
P-PAPV4-F3	5'-GCAGATGTTCAATTATCACAGG-3'	3127-4358	1232		
P-PAPV4-R3	5'-TCCTCTGTGTGGCCGGTATAACT-3'				
P-PAPV4-F4	5'-GTTCCCTAAGTGGAAAAGGCCAG-3'	4051-5014	964		
P-PAPV4-R4	5'-GTCAGACATCTTTGTTGCATCAG-3'				
O-PAPV4-F1	5'-CACTTCCGCATTAGTGCTGAATC-3'	64-1940	1877	Amplify full-length O-PARV4 genomes in ovine and Tibetan sheep	JF504700
O-PAPV4-R1	5'-GAGGTACCTTTGATATTCCTCGTC-3'				
O-PAPV4-F2	5'-GATAGTGAAGATGATTGGTTCC-3'	1761-2906	1146		
O-PAPV4-R2	5'-GGAGTAGTTCCTCTACCACTGTC 3'				
O-PAPV4-F3	5'-GTGCTATATGACCTGTATAGATC-3'	2689-4253	1565		
O-PAPV4-R3	5'-TCAGTGGGCATCATTAGAGATG-3'				
O-PAPV4-F4	5'-GAACCATGTTCCCTGGCCCATCTC-3'	4215-5122	908		
O-PAPV4-R4	5'- CAAGAATCAGGCTCAGACACAC-3'				

F, forward; R, reverse orientation; Y = C/T; K = G/T; R = A/G; M = C/A; W = T/A;

^a Nucleotide positions are according to the genomes of Porcine hokovirus strain HK6 (EU200676) and Ovine hokovirus strain HK-S04(JF504700).

^b Amplicon size is given in base pairs

^c The aim of the primers used in this study.