

Fig.S1

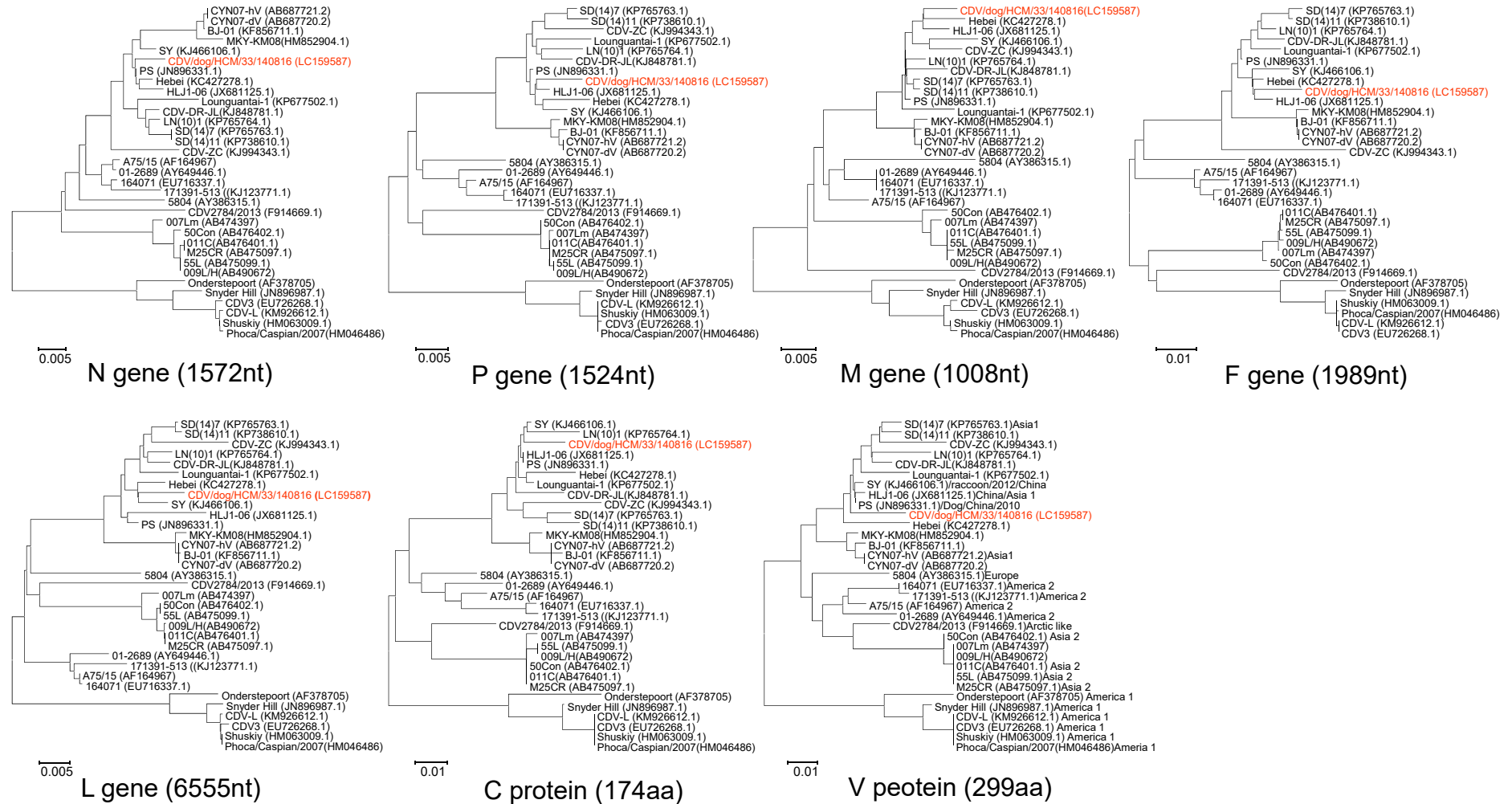


Fig. S1. Phylogenetic analysis based on the nucleotide sequences of N, P, M, F and L genes and the amino acids of C and V proteins. The Vietnamese strain, CDV/dog/HCM/33/140816, isolated in this study is shown in red.

Table S1. Vietnamese dogs from which CDVs were isolated or detected by RT-PCR								
Strains	Breeds	Place	Age (month)	Sex	Date	Clinical sign	RT-PCR or isolation	Accession number
CDV/dog/HCM/01/141013	Vietnamese dog	Thu Duc	8	Male	2013/10/18	Diarrhea, cough, nasal discharge	RT-PCR (feces)	LC159583
CDV/dog/HCM/24/140112	Vietnamese dog	District 6	4	Female	2014/1/12	Diarrhea	RT-PCR (feces)	LC159584
CDV/dog/HCM/29/140127	Vietnamese dog	District 10	4	Male	2014/1/27	Diarrhea	RT-PCR (feces)	LC159585
CDV/dog/HCM/33/140816	Vietnamese dog	Binh Chanh	5	Female	2014/8/16	Diarrhea	Isolation (eye swab)	LC159587
CDV/dog/HCM/38/140827	Vietnamese dog	Binh Tan	2	Female	2014/8/27	Cough, diarrhea	Isolation (feces, eye swab)	LC159586

Table S2. Percent identity between the nucleotide sequences of CDV/dog/HCM/33/140816 and other CDV strains												
Strain/genotype	Accession number	Place	Host/year	Identity (%)								
				Genome	5'-NCR	N	P	M	F	H	L	3'-NCR
Asia-1												
Hebei	KC427278.1	China	Mink/2008	98.7	98.1	99.1	98.4	98.9	98.5	98.9	98.7	99.1
HLJ1-06	JX681125.1	China	Fox/2006	98.2	97.2	98.9	99.1	99.1	98.3	98.8	97.6	99.1
PS	JN896331.1	China	Dog/2010	98.6	94.4	99.4	99.1	99.1	98.2	98.7	98.6	92.5
CYN07-hV	AB687721.2	Japan(China)	Monkey/2008	97.3	99.1	98	97.7	98.3	96.6	97.2	97.5	94.3
SD(14)7	KP765763.1	China	Fox/2014	97.7	98.1	98.3	98.3	99	96.8	97.2	98.1	94.3
SY	KJ466106.1	China	Raccoon dog	98.5	99.1	99	98.8	98.6	97.8	98.7	98.7	99.1
Loungantai-1	KP677502.1	China	Panda/2015	97.8	98.1	97.8	98.1	98.4	97.4	97.4	98.1	94.3
SD(14)11	KP738610.1	China	Raccoon dog/2014	97.7	98.1	98.3	98.1	99	97	97.1	98	94.3
BJ-01	KF856711.1	China	Monkey/2006	97.3	97.2	98	97.6	98.3	96.6	97.1	97.4	94.3
MKY-KM08	HM852904.1	China	Raccoon dog/2008	97.2	97.2	97.6	97.8	98.2	96.3	97.1	97.4	92.5
LN(10)1	KP765764.1	China	Fox/2010	98	98.1	98.5	98.2	98.9	97.3	97.7	98.2	96.2
CYN07-dV	AB687720.2	Japan(China)	Monkey/2008	97.3	99.1	98	97.7	98.3	96.6	97.2	97.5	94.3
CDV-ZC	KJ994343.1	China	Raccoon dog/2013	96.8	94.4	97.6	98.1	98.4	94.8	97	97.1	95.3
CDV-DR-JL	KJ848781.1	China	Raccoon dog/2014	98	97.2	98.6	98.4	98.6	97.2	97.9	98.2	94.3
Asia-2												
50Con	AB476402.1	Japan	Dog/2009	94.3	94.4	95.7	95.1	96.1	92.6	92.5	95	90.6
007Lm	AB490680.1	Japan	Dog/2009	94.2	94.4	96.1	94.9	96.1	92.2	92.5	95	93.4
011C	AB476401.1	Japan	Dog/2009	94.1	94.4	95.7	95	96.1	92.2	92.5	94.9	90.6
55L	AB475099.1	Japan	Dog/2009	94.2	94.4	95.7	94.9	96.1	92.2	92.4	95	90.6
M25CR	AB475097.1	Japan	Dog/2009	94.1	94.4	95.7	95	96	92.2	92.5	94.9	90.6
009L/H	AB490672	Japan	Dog/2010	94.1	94.4	95.7	94.9	96.1	92.1	92.4	95	90.6
Europe												
5804	AY386315.1	Germany	Dog/2003	95.2	93.5	97.1	96.3	96.1	93.9	95	95.5	88.7
Arctic												
CDV2784/2013	KF914669.1	Italy	Dog/2013	93.8	89.7	95.8	95.3	95.4	92.2	92.8	94.6	86.8
America-1												
Onderstepoort	AF378705	USA	Dog/2001	92.4	93.5	94	93.6	94.2	90.8	91.4	93.5	88.7
Snyder Hill	JN896987.1	USA	Dog/2012	92.5	96.3	93.7	93.8	94.6	90.7	91.1	93.5	86.8
CDV-L	KM926612.1	China	fitchew/1992	92.4	96.3	93.4	93.8	94.1	90.9	91.2	93.5	86.8
CDV3	EU726268.1	China	Mink/2008	92.4	95.3	93.4	93.7	93.8	90.9	91.2	93.4	86.8
Shuskiy	HM063009.1	Kazakhstan	Mink/2007	92.4	96.3	93.5	93.8	94.2	91	91.1	93.5	86.8
Phoca/Caspian/2007	HM046486	Kazakhstan	Seal/2007	92.4	96.3	93.4	93.7	94.1	90.9	91.1	93.5	86.8
America-2												
A75/15	AF164967	Switzerland	Ferret/1999	95.9	94.4	97.8	96.6	97.4	94.2	95.2	96.3	93.4
Jan-89	AY649446.1	USA	Raccoon/2004	95.2	94.4	97.9	96.3	97.3	93.6	93.4	95.8	92.5
164071	EU716337.1	USA	Dog/2004	95.7	94.4	98	96.1	97.3	93.8	94.7	96.3	93.4
171391-513	KJ123771.1	USA	Dog/2004	95.2	94.4	97.1	96.1	97.3	93.6	94.4	95.6	93.4