Colin R Parrish

List of Publications by Year
in descending order

142 papers	10,454 citations	36691 53 h-index	43601 95 g-index
154 all docs	154 docs citations	154 times ranked	9025 citing authors

#	Article	IF	Citations
1	Ecology, evolution and spillover of coronaviruses from bats. Nature Reviews Microbiology, 2022, 20, 299-314.	13.6	108
2	Influenza D binding properties vary amongst the two major virus clades and wildlife species. Veterinary Microbiology, 2022, 264, 109298.	0.8	7
3	Generation and Characterization of Single-Cycle Infectious A (sciCIV) and Its Use as Vaccine Platform. Methods in Molecular Biology, 2022, 2465, 227-255.	0.4	0
4	Parvovirus nonstructural protein 2 interacts with chromatin-regulating cellular proteins. PLoS Pathogens, 2022, 18, e1010353.	2.1	9
5	Pregnancy enables antibody protection against intracellular infection. Nature, 2022, 606, 769-775.	13.7	22
6	Parvovirus-induced encephalitis in a juvenile raccoon. Journal of Veterinary Diagnostic Investigation, 2021, 33, 140-143.	0.5	1
7	Method comparison of targeted influenza A virus typing and whole-genome sequencing from respiratory specimens of companion animals. Journal of Veterinary Diagnostic Investigation, 2021, 33, 191-201.	0.5	7
8	Canine and Feline Influenza. Cold Spring Harbor Perspectives in Medicine, 2021, 11, a038562.	2.9	24
9	Parvoviruses of Carnivores, and the Emergence of Canine Parvovirus (Parvoviridae). , 2021, , 683-687.		0
10	Reversible <i>O</i>-Acetyl Migration within the Sialic Acid Side Chain and Its Influence on Protein Recognition. ACS Chemical Biology, 2021, 16, 1951-1960.	1.6	19
11	Sequence dynamics of three influenza A virus strains grown in different MDCK cell lines, including those expressing different sialic acid receptors. Journal of Evolutionary Biology, 2021, 34, 1878-1900.	0.8	5
12	High-resolution asymmetric structure of a Fabâ€“virus complex reveals overlap with the receptor binding site. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2025452118.	3.3	12
13	Deacetylated sialic acids modulates immune mediated cytotoxicity via the sialic acid-Siglec pathway. Glycobiology, 2021, 31, 1279-1294.	1.3	17
14	2021 Taxonomic update of phylum Negarnaviricota (Riboviria: Orthornavirae), including the large orders Bunyavirales and Mononegavirales. Archives of Virology, 2021, 166, 3513-3566.	0.9	62
15	Small but mighty: old and new parvoviruses of veterinary significance. Virology Journal, 2021, 18, 210.	1.4	30
16	2020 taxonomic update for phylum Negarnaviricota (Riboviria: Orthornavirae), including the large orders Bunyavirales and Mononegavirales. Archives of Virology, 2020, 165, 3023-3072.	0.9	184
17	Cerebellar hypoplasia and dysplasia in a juvenile raccoon with parvoviral infection. Journal of Veterinary Diagnostic Investigation, 2020, 32, 463-466.	0.5	3
18	The role of 9-O-acetylated glycan receptor moieties in the typhoid toxin binding and intoxication. PLoS Pathogens, 2020, 16, e1008336.	2.1	28

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19	Modified Sialic Acids on Mucus and Erythrocytes Inhibit Influenza A Virus Hemagglutinin and Neuraminidase Functions. Journal of Virology, 2020, 94, .	1.5	35
20	Characterizing Emerging Canine H3 Influenza Viruses. PLoS Pathogens, 2020, 16, e1008409.	2.1	29
21	Primary Swine Respiratory Epithelial Cell Lines for the Efficient Isolation and Propagation of Influenza A Viruses. Journal of Virology, 2020, 94, .	1.5	11
22	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
23	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
24	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
25	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
26	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
27	Characterizing Emerging Canine H3 Influenza Viruses. , 2020, 16, e1008409.		0
28	Improving risk assessment of the emergence of novel influenza A viruses by incorporating environmental surveillance. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180346.	1.8	11
29	Onward transmission of viruses: how do viruses emerge to cause epidemics after spillover?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20190017.	1.8	41
30	Asymmetry in icosahedral viruses. Current Opinion in Virology, 2019, 36, 67-73.	2.6	7
31	Limited Intrahost Diversity and Background Evolution Accompany 40 Years of Canine Parvovirus Host Adaptation and Spread. Journal of Virology, 2019, 94, .	1.5	53
32	Influenza Viruses in Mice: Deep Sequencing Analysis of Serial Passage and Effects of Sialic Acid Structural Variation. Journal of Virology, 2019, 93, .	1.5	15
33	Recognition of specific sialoglycan structures by oral streptococci impacts the severity of endocardial infection. PLoS Pathogens, 2019, 15, e1007896.	2.1	27
34	Expression of 9- <i>O</i> - and 7,9- <i>O</i> -Acetyl Modified Sialic Acid in Cells and Their Effects on Influenza Viruses. MBio, 2019, 10, .	1.8	35
35	Transferrin receptor binds virus capsid with dynamic motion. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 20462-20471.	3.3	24
36	Examination and Reconstruction of Three Ancient Endogenous Parvovirus Capsid Protein Gene Remnants Found in Rodent Genomes. Journal of Virology, 2019, 93, .	1.5	13

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37	Viral highway to nucleus exposed by image correlation analyses. Scientific Reports, 2018, 8, 1152.	1.6	10
38	Mammalian Adaptation of an Avian Influenza A Virus Involves Stepwise Changes in NS1. Journal of Virology, 2018, 92, .	1.5	31
39	Complex and Dynamic Interactions between Parvovirus Capsids, Transferrin Receptors, and Antibodies Control Cell Infection and Host Range. Journal of Virology, 2018, 92, .	1.5	29
40	Pre-B acute lymphoblastic leukemia expresses cell surface nucleolin as a 9-O-acetylated sialoglycoprotein. Scientific Reports, 2018, 8, 17174.	1.6	10
41	Probing Antibody Binding to Canine Parvovirus with Charge Detection Mass Spectrometry. Journal of the American Chemical Society, 2018, 140, 15701-15711.	6.6	24
42	Exposing a Virus Hiding in the Animal Facility. Cell, 2018, 175, 310-311.	13.5	1
43	The HIV Integrase Inhibitor Raltegravir Inhibits Felid Alphaherpesvirus 1 Replication by Targeting both DNA Replication and Late Gene Expression. Journal of Virology, 2018, 92, .	1.5	1
44	Multiple Incursions and Recurrent Epidemic Fade-Out of H3N2 Canine Influenza A Virus in the United States. Journal of Virology, 2018, 92, .	1.5	30
45	A live-attenuated influenza vaccine for H3N2 canine influenza virus. Virology, 2017, 504, 96-106.	1.1	27
46	A Chemical Biology Solution to Problems with Studying Biologically Important but Unstable 9-O-Acetyl Sialic Acids. ACS Chemical Biology, 2017, 12, 214-224.	1.6	37
47	Pathways to zoonotic spillover. Nature Reviews Microbiology, 2017, 15, 502-510.	13.6	702
48	Temperature-Sensitive Live-Attenuated Canine Influenza Virus H3N8 Vaccine. Journal of Virology, 2017, 91, .	1.5	23
49	The K186E Amino Acid Substitution in the Canine Influenza Virus H3N8 NS1 Protein Restores Its Ability To Inhibit Host Gene Expression. Journal of Virology, 2017, 91, .	1.5	25
50	Distribution of O-Acetylated Sialic Acids among Target Host Tissues for Influenza Virus. MSphere, 2017, 2, .	1.3	56
51	A bivalent live-attenuated influenza vaccine for the control and prevention of H3N8 and H3N2 canine influenza viruses. Vaccine, 2017, 35, 4374-4381.	1.7	14
52	GENETIC CHARACTERIZATION OF CANINE PARVOVIRUS IN SYMPATRIC FREE-RANGING WILD CARNIVORES IN PORTUGAL. Journal of Wildlife Diseases, 2017, 53, 824-831.	0.3	13
53	Parvovirus Capsid Structures Required for Infection: Mutations Controlling Receptor Recognition and Protease Cleavages. Journal of Virology, 2017, 91, .	1.5	23
54	Canine influenza viruses with modified NS1 proteins for the development of live-attenuated vaccines. Virology, 2017, 500, 1-10.	1.1	28

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55	Spread of Canine Influenza A(H3N2) Virus, United States. Emerging Infectious Diseases, 2017, 23, 1950-1957.	2.0	70
56	Effects of Sialic Acid Modifications on Virus Binding and Infection. Trends in Microbiology, 2016, 24, 991-1001.	3.5	104
57	Near-Atomic Resolution Structure of a Highly Neutralizing Fab Bound to Canine Parvovirus. Journal of Virology, 2016, 90, 9733-9742.	1.5	27
58	Comparing the functions of equine and canine influenza H3N8 virus PA-X proteins: Suppression of reporter gene expression and modulation of global host gene expression. Virology, 2016, 496, 138-146.	1.1	18
59	Epidemiological evolution of canine parvovirus in the Portuguese domestic dog population. Veterinary Microbiology, 2016, 183, 37-42.	0.8	28
60	Single-Particle Tracking Shows that a Point Mutation in the Carnivore Parvovirus Capsid Switches Binding between Host-Specific Transferrin Receptors. Journal of Virology, 2016, 90, 4849-4853.	1.5	11
61	Single Mutations in the VP2 300 Loop Region of the Three-Fold Spike of the Carnivore Parvovirus Capsid Can Determine Host Range. Journal of Virology, 2016, 90, 753-767.	1.5	65
62	Influenza Virus Reservoirs and Intermediate Hosts: Dogs, Horses, and New Possibilities for Influenza Virus Exposure of Humans. Journal of Virology, 2015, 89, 2990-2994.	1.5	156
63	Equine and Canine Influenza H3N8 Viruses Show Minimal Biological Differences Despite Phylogenetic Divergence. Journal of Virology, 2015, 89, 6860-6873.	1.5	36
64	Parvovirus Family Conundrum: What Makes a Killer?. Annual Review of Virology, 2015, 2, 425-450.	3.0	53
65	Factors affecting the occurrence of canine parvovirus in dogs. Veterinary Microbiology, 2015, 180, 59-64.	0.8	31
66	Global Displacement of Canine Parvovirus by a Host-Adapted Variant: Structural Comparison between Pandemic Viruses with Distinct Host Ranges. Journal of Virology, 2015, 89, 1909-1912.	1.5	36
67	Cyclic Avian Mass Mortality in the Northeastern United States Is Associated with a Novel Orthomyxovirus. Journal of Virology, 2015, 89, 1389-1403.	1.5	68
68	Improving pandemic influenza risk assessment. ELife, 2014, 3, e03883.	2.8	53
69	Canine parvovirus 2c infection in a cat with severe clinical disease. Journal of Veterinary Diagnostic Investigation, 2014, 26, 462-464.	0.5	33
70	Contact Heterogeneity, Rather Than Transmission Efficiency, Limits the Emergence and Spread of Canine Influenza Virus. PLoS Pathogens, 2014, 10, e1004455.	2.1	43
71	Parvoviruses of Carnivores. , 2014, , 39-61.		1
72	Host-Specific Parvovirus Evolution in Nature Is Recapitulated by In Vitro Adaptation to Different Carnivore Species. PLoS Pathogens, 2014, 10, e1004475.	2.1	104

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73	Parvovirus particles and movement in the cellular cytoplasm and effects of the cytoskeleton. Virology, 2014, 456-457, 342-352.	1.1	7
74	Infection and Pathogenesis of Canine, Equine, and Human Influenza Viruses in Canine Tracheas. Journal of Virology, 2014, 88, 9208-9219.	1.5	37
75	Feline panleukopenia virus: Its interesting evolution and current problems in immunoprophylaxis against a serious pathogen. Veterinary Microbiology, 2013, 165, 29-32.	0.8	40
76	Frequent Cross-Species Transmission of Parvoviruses among Diverse Carnivore Hosts. Journal of Virology, 2013, 87, 2342-2347.	1.5	121
77	Canine and feline parvoviruses preferentially recognize the non-human cell surface sialic acid N-glycolylneuraminic acid. Virology, 2013, 440, 89-96.	1.1	38
78	Capsid Antibodies to Different Adeno-Associated Virus Serotypes Bind Common Regions. Journal of Virology, 2013, 87, 9111-9124.	1.5	102
79	Role of Multiple Hosts in the Cross-Species Transmission and Emergence of a Pandemic Parvovirus. Journal of Virology, 2012, 86, 865-872.	1.5	85
80	Examining the cross-reactivity and neutralization mechanisms of a panel of mAbs against adeno-associated virus serotypes 1 and 5. Journal of General Virology, 2012, 93, 347-355.	1.3	43
81	Limited Transferrin Receptor Clustering Allows Rapid Diffusion of Canine Parvovirus into Clathrin Endocytic Structures. Journal of Virology, 2012, 86, 5330-5340.	1.5	54
82	The Role of Evolutionary Intermediates in the Host Adaptation of Canine Parvovirus. Journal of Virology, 2012, 86, 1514-1521.	1.5	49
83	Prediction and prevention of the next pandemic zoonosis. Lancet, The, 2012, 380, 1956-1965.	6.3	744
84	Evolutionary Reconstructions of the Transferrin Receptor of Caniforms Supports Canine Parvovirus Being a Re-emerged and Not a Novel Pathogen in Dogs. PLoS Pathogens, 2012, 8, e1002666.	2.1	70
85	Bridging Taxonomic and Disciplinary Divides in Infectious Disease. EcoHealth, 2011, 8, 261-267.	0.9	20
86	The emergence of parvoviruses of carnivores. Veterinary Research, 2010, 41, 39.	1.1	151
87	Intra- and Interhost Evolutionary Dynamics of Equine Influenza Virus. Journal of Virology, 2010, 84, 6943-6954.	1.5	97
88	Microevolution of Canine Influenza Virus in Shelters and Its Molecular Epidemiology in the United States. Journal of Virology, 2010, 84, 12636-12645.	1.5	46
89	Intrahost Evolutionary Dynamics of Canine Influenza Virus in NaÌˆve and Partially Immune Dogs. Journal of Virology, 2010, 84, 5329-5335.	1.5	61
90	Structures and Functions of Parvovirus Capsids and the Process of Cell Infection. Current Topics in Microbiology and Immunology, 2010, 343, 149-176.	0.7	30

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91	Binding Site on the Transferrin Receptor for the Parvovirus Capsid and Effects of Altered Affinity on Cell Uptake and Infection. Journal of Virology, 2010, 84, 4969-4978.	1.5	36
92	Early Steps in Cell Infection by Parvoviruses: Host-Specific Differences in Cell Receptor Binding but Similar Endosomal Trafficking. Journal of Virology, 2009, 83, 10504-10514.	1.5	45
93	Structural Comparison of Different Antibodies Interacting with Parvovirus Capsids. Journal of Virology, 2009, 83, 5556-5566.	1.5	72
94	The parvovirus capsid odyssey: from the cell surface to the nucleus. Trends in Microbiology, 2008, 16, 208-214.	3.5	57
95	Cross-Species Virus Transmission and the Emergence of New Epidemic Diseases. Microbiology and Molecular Biology Reviews, 2008, 72, 457-470.	2.9	648
96	Detecting Small Changes and Additional Peptides in the Canine Parvovirus Capsid Structure. Journal of Virology, 2008, 82, 10397-10407.	1.5	23
97	Phylogenetic analysis reveals the emergence, evolution and dispersal of carnivore parvoviruses. Journal of General Virology, 2008, 89, 2280-2289.	1.3	137
98	Within-Host Genetic Diversity of Endemic and Emerging Parvoviruses of Dogs and Cats. Journal of Virology, 2008, 82, 11096-11105.	1.5	57
99	Comparative analysis reveals frequent recombination in the parvoviruses. Journal of General Virology, 2007, 88, 3294-3301.	1.3	92
100	Asymmetric binding of transferrin receptor to parvovirus capsids. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6585-6589.	3.3	78
101	Minute Virus of Mice, a Parvovirus, in Complex with the Fab Fragment of a Neutralizing Monoclonal Antibody. Journal of Virology, 2007, 81, 9851-9858.	1.5	33
102	From structure of the complex to understanding of the biology. Acta Crystallographica Section D: Biological Crystallography, 2007, 63, 9-16.	2.5	17
103	Different mechanisms of antibody-mediated neutralization of parvoviruses revealed using the Fab fragments of monoclonal antibodies. Virology, 2007, 361, 283-293.	1.1	51
104	Purified Feline and Canine Transferrin Receptors Reveal Complex Interactions with the Capsids of Canine and Feline Parvoviruses That Correspond to Their Host Ranges. Journal of Virology, 2006, 80, 8482-8492.	1.5	56
105	High rate of viral evolution associated with the emergence of carnivore parvovirus. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 379-384.	3.3	471
106	THE ORIGINS OF NEW PANDEMIC VIRUSES: The Acquisition of New Host Ranges by Canine Parvovirus and Influenza A Viruses. Annual Review of Microbiology, 2005, 59, 553-586.	2.9	246
107	Parvovirus Infection of Cells by Using Variants of the Feline Transferrin Receptor Altering Clathrin-Mediated Endocytosis, Membrane Domain Localization, and Capsid-Binding Domains. Journal of Virology, 2004, 78, 5601-5611.	1.5	30
108	Polymerase Chain Reaction (PCR) Amplification of Parvoviral DNA from the Brains of Dogs and Cats with Cerebellar Hypoplasia. Journal of Veterinary Internal Medicine, 2003, 17, 538-544.	0.6	54

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109	Parvovirus host range, cell tropism and evolution. Current Opinion in Microbiology, 2003, 6, 392-398.	2.3	169
110	The Natural Host Range Shift and Subsequent Evolution of Canine Parvovirus Resulted from Virus-Specific Binding to the Canine Transferrin Receptor. Journal of Virology, 2003, 77, 1718-1726.	1.5	208
111	Residues in the Apical Domain of the Feline and Canine Transferrin Receptors Control Host-Specific Binding and Cell Infection of Canine and Feline Parvoviruses. Journal of Virology, 2003, 77, 8915-8923.	1.5	68
112	Combinations of Two Capsid Regions Controlling Canine Host Range Determine Canine Transferrin Receptor Binding by Canine and Feline Parvoviruses. Journal of Virology, 2003, 77, 10099-10105.	1.5	92
113	Structures of Host Range-Controlling Regions of the Capsids of Canine and Feline Parvoviruses and Mutants. Journal of Virology, 2003, 77, 12211-12221.	1.5	76
114	Polymerase Chain Reaction (PCR) Amplification of Parvoviral DNA from the Brains of Dogs and Cats with Cerebellar Hypoplasia. , 2003, 17, 538.		3
115	Evolutionary Dynamics of Viral Attenuation. Journal of Virology, 2002, 76, 10524-10529.	1.5	56
116	The VP1 N-Terminal Sequence of Canine Parvovirus Affects Nuclear Transport of Capsids and Efficient Cell Infection. Journal of Virology, 2002, 76, 1884-1891.	1.5	125
117	The structure of porcine parvovirus: comparison with related viruses. Journal of Molecular Biology, 2002, 315, 1189-1198.	2.0	122
118	The Canine Minute Virus (Minute Virus of Canines) Is a Distinct Parvovirus That Is Most Similar to Bovine Parvovirus. Virology, 2002, 302, 219-223.	1.1	55
119	Parvovirus Infections in Wild Carnivores. Journal of Wildlife Diseases, 2001, 37, 594-607.	0.3	175
120	Canine Parvovirus Capsid Assembly and Differences in Mammalian and Insect Cells. Virology, 2001, 279, 546-557.	1.1	58
121	Canine and Feline Parvoviruses Can Use Human or Feline Transferrin Receptors To Bind, Enter, and Infect Cells. Journal of Virology, 2001, 75, 3896-3902.	1.5	209
122	Comparison of Two Single-Chain Antibodies That Neutralize Canine Parvovirus: Analysis of an Antibody-Combining Site and Mechanisms of Neutralization. Virology, 2000, 269, 471-480.	1.1	35
123	Cellular Uptake and Infection by Canine Parvovirus Involves Rapid Dynamin-Regulated Clathrin-Mediated Endocytosis, Followed by Slower Intracellular Trafficking. Journal of Virology, 2000, 74, 1919-1930.	1.5	124
124	Host range and variability of calcium binding by surface loops in the capsids of canine and feline parvoviruses. Journal of Molecular Biology, 2000, 300, 597-610.	2.0	70
125	Host range relationships and the evolution of canine parvovirus. Veterinary Microbiology, 1999, 69, 29-40.	0.8	97
126	A Heterogeneous Nuclear Ribonucleoprotein A/B-Related Protein Binds to Single-Stranded DNA near the 5â€² End or within the Genome of Feline Parvovirus and Can Modify Virus Replication. Journal of Virology, 1999, 73, 7761-7768.	1.5	23

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127	Nonstructural Protein-2 and the Replication of Canine Parvovirus. Virology, 1998, 240, 273-281.	1.1	53
128	Assaying for Structural Variation in the Parvovirus Capsid and Its Role in Infection. Virology, 1998, 250, 106-117.	1.1	91
129	Evolution of Canine Parvovirus Involved Loss and Gain of Feline Host Range. Virology, 1996, 215, 186-189.	1.1	217
130	Structural Analysis of a Mutation in Canine Parvovirus Which Controls Antigenicity and Host Range. Virology, 1996, 225, 65-71.	1.1	78
131	3 Pathogenesis of feline panleukopenia virus and canine parvovirus. Best Practice and Research: Clinical Haematology, 1995, 8, 57-71.	1.1	111
132	Analysis of the Cell and Erythrocyte Binding Activities of the Dimple and Canyon Regions of the Canine Parvovirus Capsid. Virology, 1995, 211, 123-132.	1.1	53
133	Two Dominant Neutralizing Antigenic Determinants of Canine Parvovirus Are Found on the Threefold Spike of the Virus Capsid. Virology, 1994, 198, 175-184.	1.1	153
134	Characterization of the Feline Host Range and a Specific Epitope of Feline Panleukopenia Virus. Virology, 1994, 200, 494-503.	1.1	67
135	The structure of a neutralized virus: canine parvovirus complexed with neutralizing antibody fragment. Structure, 1994, 2, 595-607.	1.6	88
136	Structure determination of feline panleukopenia virus empty particles. Proteins: Structure, Function and Bioinformatics, 1993, 16, 155-171.	1.5	167
137	Mutations adjacent to the dimple of the canine parvovirus capsid structure affect sialic acid binding. Virology, 1992, 191, 301-308.	1.1	69
138	Mapping specific functions in the capsid structure of canine parvovirus and feline panleukopenia virus using infectious plasmid clones. Virology, 1991, 183, 195-205.	1.1	203
139	Emergence, Natural History, and Variation of Canine, Mink, and Feline Parvoviruses. Advances in Virus Research, 1990, 38, 403-450.	0.9	144
140	Canine host range and a specific epitope map along with variant sequences in the capsid protein gene of canine parvovirus and related feline, mink, and raccoon parvoviruses. Virology, 1988, 166, 293-307.	1.1	168
141	Characterization of a nonhernagglutinating mutant of canine parvovirus. Virology, 1988, 163, 230-232.	1.1	34
142	Characterization and recombination mapping of an antigenic and host range mutation of canine parvovirus. Virology, 1986, 148, 121-132.	1.1	86