

عنوان مقاله:

Isolation and molecular characteristics of a recombinant feline calicivirus from Qingdao, China

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خلاصه مقاله:

Feline calicivirus (FCV) is a highly contagious pathogen seriously affecting the upper respiratory tract and producing oral diseases in the feline. Despite widespread vaccination, the prevalence of FCV remains high. In this study, the FCV qingdao (qd)/۲۰۱۹/china was isolated from a domestic feline oropharyngeal swab collected from Qingdao, China. The virus was purified using the plaque assay and identified using the Polymerase chain reaction and indirect immunofluorescence assay methods, the capsid amino acid, VP₁ of qd/۲۰۱۹/china, showed sequence identity with the other isolates ranging between ۸۳.۹۰% (ym۳/۲۰۰۱/jp) and ۹۱.۱۰% (CH-JL۴). The sequence of the capsid amino acid revealed qd/۲۰۱۹/china to be closely related to CH-JL۴ and clustered with CH-JL۴ in the phylogenetic tree. The phylogenetic analysis indicated that the complete genomes (GenBank® accession No. MZ۳۲۲۸۹۶) of qd/۲۰۱۹/china and CH-JL۴ were also classified into the same cluster. The recombination analysis with Simplot indicated that the qd/۲۰۱۹/china originated from the recombination of CH-JL۴ and HRB-SS, and the region ۳,۸۲۱ - ۵,۳۰۱ nt originated from HRB-SS. Further, the region ۳,۸۲۱ - ۵,۳۰۱ nt were found to belong to the protease-polymerase (PP) of HRB-SS. Here, we isolated a new recombinant virus, FCV qd/۲۰۱۹/china. Therefore, these results would be beneficial for better understanding of the evolution and epidemiology of FCV.

کلمات کلیدی:

Feline calicivirus, Isolation, Recombination

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