

Molecular-Genetics Studies of New Unknown APMV Isolated from Wild Bird in Ukraine

Authors : Borys Stegnyy, Anton Gerilovych, Oleksii Solodiankin, Vitaliy Bolotin, Anton Stegnyy, Denys Muzyka, Claudio Afonso

Abstract : New APMV was isolated from white fronted goose in Ukraine. This isolate was tested serologically using monoclonal antibodies in haemagglutination-inhibition tests against APMV1-9. As the results obtained isolate showed cross reactions with APMV7. Following investigations were provided for the full genome sequencing using random primers and cloning into pCRII-TOPO. Analysis of 100 transformed colonies of E.coli using traditional sequencing gave us possibilities to find only 3 regions, which could identify by BLAST. The first region with the length of 367 bp had 70 % nucleotide sequence identity to the APMV 12 isolate Wigeon/Italy/3920_1/2005 at genome position 2419-2784. Next region (344 bp) had 66 % identity to the same APMV 12 isolate at position 4760-5103. The last region (365 bp) showed 71 % identity to Newcastle disease virus strain M4 at position 12569-12928.

Keywords : APMV, Newcastle disease virus, Ukraine, full genome sequencing

Conference Title : ICMGM 2014 : International Conference on Molecular Genetics and Microbiology

Conference Location : Bangkok, Thailand

Conference Dates : December 24-25, 2014