

# Characterization of a rotavirus rearranged gene 11 by gene reassortment

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The effect of replacement of gene 11 of rotavirus SA-11 by a gene carrying a head to tail duplication obtained from a swine rotavirus strain was studied. The swine rotavirus strain with a duplicated gene (CC86) exhibits both a phenotype that allows to overgrow other viral strains when coinfecting and an increased plaque size when plated in both CV-1 and MA-104 monkey kidney cells. Using reassortment methods the duplicated gene of the swine rotavirus was introduced into the SA-11 virus, replacing the regular gene 11. The reassorted strain was characterized to find out the origin of each of the other viral gene segments. Based on electrophoretic mobilities segments 1, 2, 3, 5, 7, 8 and 10 were identified as of SA-11. The SA-11 origin of the segments 4, 6 and 9 was confirmed by neutralization with polyclonal and monoclonal antibodies and by ELISA. The results suggest that the new reassortant virus was a monoreassortant carrying SA-11 genes except the duplicated gene originated from the swi