

E337 Characterization of the Herpes Simplex Virus Type 1(HSV-1)
isolated from Korean patients.

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In this study, we characterized the features of HSV-1 which was isolated from Korean patient. The isolated HSV-1 from Korean patient, named as KHS1, produced the cell-associated and non-syncytial plaques in Vero cells. We found that KHS1 had a longer eclipse period in productive infection compared with KOS and F strains. We also found that the production of progeny virus of KHS1 in single replication cycle was not dependent on multiplicity of infection. At post-infection 12hr, KSH1 produced 10 times less progeny viruses than KOS at MOI 0.01 and 0.1, however, 3 times less at MOI 1. We tested in vivo feature of virus using mouse model system. KHS1 exhibited longer shedding time than other strains in mouse eye swap experiment. We also found that KHS1 has a higher neurotropic affinity by checking the presence of virus in trigeminal ganglia after the infection of virus in eyes. The replication rate of KSH1 is faster than other strains in trigeminal ganglia, however, the establishment of latent infection, KHS1 has almost same ability as other strains.

E338 Effect of culture conditions on the biosynthesis of
polyhydroxyalkanoates from *Pseudomonas* sp. HJ-2

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Pseudomonas sp. HJ-2 which was isolated from activated sludge, accumulated various polyhydroxyalkanoates (PHAs) with unusual pattern of monomer units depending on the carbon sources used. The organism produced PHAs consisting of short-chain-length and medium-chain-length 3-hydroxyalkanoic acids as monomer units. Most interesting was the accumulation of a polyester consisting significant relevant fractions of 3-hydroxybutyrate (3HB), 3-hydroxyvalerate (3HV) and 3-hydroxyheptanoate (3HHp) from heptanoic acid. The monomeric composition of this polyester was altered depending upon various culture conditions. The increase of pH from 7.0 resulted in a progressive decrease of 3HB and 3HV contents in the polyester and poly(3HHp) homopolymer was produced at pH 8.0. The molar fraction of 3HHp in the polyester was somewhat decreased by low dissolved oxygen concentration.