

# Isolation and Characterization of a Baculovirus Pathogenic to Gypsy Moth, *Lymantria dispar*

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The *Lymantria dispar* multinucleocapsid nucleopolyhedrovirus, LdMNPV-NM, was isolated from dead larvae in Korea and characterized by electron microscopic observation, SDS-PAGE of polyhedral protein and restriction endonuclease analysis of viral DNA. Polyhedra of LdMNPV-NM showed irregular appearance in shape with the diameter of 1.6~2.1  $\mu\text{m}$ . Numerous virions comprised of multinucleocapsid were evident in electron microscopic examination of cross sections of polyhedra. Ld652Y (*L. dispar* 652Y) cells infected with LdMNPV-NM displayed typical features of NPV infection and many free polyhedra were observed. Ld652Y cells ( $3 \times 10^5$  cells) infected with 1 TCID<sub>50</sub> unit of LdMNPV-NM produced  $1.74 \times 10^7$  polyhedra in 9 days p.i. LdMNPV-NM polyhedra were composed of a major protein of 30 kDa which is comparable to the major proteins of AcMNPV (31 kDa) and BmNPV (30 kDa). The restriction enzyme digestion patterns of LdMNPV-NM and LdMNPV isolate derived from Gypchek<sup>®</sup>, showed a similar overall profile with minor differences.