Expression of a New Viral Enhancing Factor (Enhancin) Gene of Lymantria dispar Nucleopolyhedrovirus

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An enhancin gene that is capable of enhancing the infection of other baculoviruses. has been identified from Lymantria dispar nucleopolyhedrovirus isolated in Korea (LdNPV-NM). The enhancin gene was cloned by PCR and its nucleotide and amino acid sequences were determined. The LdNPV-NM enhancin gene was composed of 2,352 nucleotides and encoded 783-amino acids. The enhancin gene was inserted into pBacPAK9 transfer vector, under the control of the polyhedrin promoter, and cotransfected into Sf9 insect cells with bAcGOZA. The recombinant virus was purified by end-point dilutions. The expressed enhancin was estimated 89 kDa in size by SDS-PAGE.