

**F332**

Cloning and Sequencing of Invasion Related Gene  
Fragment in SPI1 of *Salmonella typhimurium*

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Two Clusters of invasion related genes of *Salmonella typhimurium* are called Salmonella pathogenicity island 1,2(SPI1, SPI2). SPI1 is known to genes governing invasion of salmonellae into mammaian epithelial cell. We gained 9kb DNA fragment as a invasion related gene in the SPI1 by southern blot hybridization using *prgH* probe. We are carrying out transformation of 9kb DNA fragment into *E. coli.*, sequencing, and investigating homology with invasion related genes recently reported by sequences analysis of 9kb DNA fragment.

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Analysis of Membrane Targeting and Capping of LMP1 of Epstein-Barr  
Virus Using Green Fluorescence Protein as a tracer

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LMP1 is a latent membrane protein encoded by Epstein-Barr virus and plays essential roles in EBV-induced B cell transformation. LMP1, an integral membrane protein of 386 amino acids, consists of a short amino-terminal cytoplasmic domain (25 aa), six transmembrane domain, and a long carboxy-terminal cytoplasmic domain. Previous studies have shown that LMP1 molecules expressed on the plasma membrane aggregate spontaneously and such a patching and capping of LMP1 is essential for activity of LMP1 proteins. To dissect the mechanisms underlining membrane targeting and spontaneous capping of LMP1 proteins, we generated a series of LMP1-GFP fusion genes and analysed their membrane expression patterns by transfecting them in EBV-negative B lymphoma cells, BJAB. The results indicate that the membrane targeting and capping signal for LMP1 is encoded in the amino-terminal cytoplasmic domain and all six tranmembrane domains.