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Nucleotide Sequence and Characterization of pFMBL1, a small cryptic plasmid from *Leuconostoc mesenteroides* SY2

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A 4661bp cryptic plasmid, pFMBL1, of *Leuconostoc mesenteroides* SY2, a strain isolated from kimchi, was cloned and characterized. pFMBL1 was cloned into pUC19, and the complete nucleotide sequence was determined. The nucleotide sequence analysis revealed two open reading frames, ORF1 and ORF2. The ORF1 was 786 bp in size and showed 28% homology with the hypothetical protein of *Bacillus subtilis* plasmid pTA1060. The ORF2 was 453 bp in size and showed 58% homology with theputative replication initiation protein of *Leuconostoc mesenteroides* subsp. *mesenteroide* Y110 cryptic plasmid, pTXL1. A 3.3 kb *Sal* I fragment of pFMBL1 was subcloned into pBluescript IIKS(+). The recombinant plasmid was named pSJ33. A 1.1 kb *Emr* gene from pVS2 was ligated with pSJ33, resulting in pSJ33E. pSJ33E was able to replicate in *Leuconostoc mesenteroides* SY1, another strain isolated from Kimchi.