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Characterization of the Small Cryptic Plasmid, pMGD2, of *Klebsiellia* sp. KCL-2.

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One of the cryptic plasmids from the oil degrading bacterium *Klebsiella* sp. KCL-2, the small plasmid pGD2 has been identified and characterized. This plasmid has a size of 3.6 kb with unknown functions. We constructed several recombinant subclones from pGD2. The nucleotide sequences of the plasmid were determined and two open reading frames were detected. ORF1 encodes a replication initiator protein (RepA), which has a high degree of homology to the protein of ColE2 plasmid. The product encoded by ORF2 showed a high similarity to the transposase protein of IS5. IS5 is 1195 bp long and contains an inverted terminal repetition of 16 bp, with one mismatch. A stem-loop structures in the 5'untranslated region of the *repA* suggest that the *incA* gene encodes a small antisense RNA.

Key Word: Klebsiella sp., Cryptic plasmid, Replication initiator protein, IS5