F835 Mitochondrial DNA mutation analysis in stomach cancer

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A spate of study showed that accumulation of mitochondrial DNA(mtDNA) deletion is closely related with aging. Especially muscle tissues show multiple spectrum of mtDNA deletion, it has been known mitochondrial myopathy occur due to deficiency of respiratory chain. So we attempt to detect occurrence of mtDNA deletion in stomach cancer using *In situ* Hybridization and Polymerase Chain Reaction(PCR). *In situ* hybridization with cytochrome c oxidase subunit III(CoxIII) probe on microdissected stomach tissue revealed decreased level of signal in cancer. Likewise PCR analysis detect increased level of common deletion(4977base pair). This result suggests that mtDNA deletions arise during the carcinogenesis in stomach.

F836 Comparison of Internal Transcribed Spacer (ITS) 1 Region Between Dendropanax morbifera and D. trifidus

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We performed genetic analysis between *Dendropanax morbifera* and *D. trifidus* by comparising with the base sequences in the internal transcribed spacer (ITS 1), that is located between nuclear small rDNA and coding region of the 5.8s nuclear ribosomal DNA. The size of the investigated regions appeared 284 bp of *D. morbifera* and 282 bp of *D. trifidus*, respectively. They showed 7 point mutations (base substitution) and 2 insertions or deletions in 254 bp and 264 bp sites of ITS 1. On the other hand, the content of (G+C) in these regions was 60.56% in *D. morbifera* and 60.99% in *D. trifidus*. These results showed that genetic relationships according to the base sequence in these two species was very close as those of previous PCR-RAPD analysis on these species. In the view of the results so far achieved it is intended these two species to be located under very close similarity.