

Disruption of *Candida albicans* IFF4 gene involves modifications of the cell electrical surface properties.

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| R sum  en anglais | <p>During the past two decades, the prevalence of candidiasis has increased markedly and <i>Candida albicans</i> has now become one of the most important causes of nosocomial infections, especially after colonization of inert surfaces such as catheters or prostheses. In a previous report, we demonstrated the overexpression of 35 unidentified genes in response to adherence of <i>C. albicans</i> germ tubes to plastic. Therefore, a bioinformatic analysis was performed searching for genes encoding surface proteins potentially involved in adherence. Nineteen genes were thus selected, and one of them, CaIFF4, was further investigated. The deduced protein of this CaIFF4 gene revealed a glycosylphosphatidylinositol (GPI)-anchored site as well as the presence of a N-terminal signal peptide. Disruption of both alleles of CaIFF4 gene from <i>C. albicans</i> parent strain BWP17 was performed by PCR method. Then investigations of properties of null mutant for CaIFF4 gene showed a decrease of adherence of germ tubes to plastic in comparison to the parent strain BWP17. Besides, electrophoretic mobilities of germ tubes of CaIFF4 null mutant and of parental strain BWP17 were measured. Data were then analysed with soft particles analysis theory. Results point out a less important electrophoretic mobility of germ tubes of CaIFF4 null mutant in comparison to germ tubes of BWP17 parental strain.</p> |
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Liens

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