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Cloning of genes induced under heavy metal, cadmium, stress in *Candida* sp.

홍윤미*, 이혜숙, 이세영[1], 최순용
한남대학교 이과대학 미생물학과, 고려대학교 자연자원대학 농화학과

Cadmium is a highly toxic substance to living organisms. Many organisms have evolved a variety of mechanisms to provide cellular protecion against the adverse effects that cadmium can have on many biochemical processes. Because there is currently uncertainty about the relative importance of the various potential mechanisms for heavy metal detoxification in eukaryotic cells, we have adopted a molecular approach to the study of heavy metal detoxification mechanisms by the isolation of cadmium-response genes from the yeast, *Candida* species. In order to identify cadmium-induced gene expression, the differential display was used with total RNA purified from the control and cadmium-treated cells. Total RNAs were reverse transcribed with an one base-anchored oligo-dT primer, followed by the PCR in the presence of a second short primer of arbitrary sequence. Several differentially expressed hands were purified from the polyacrylamide gel and reamplified. We will disscuss about the expression of several clones induced in response to cadmium.