

## **0763 Differential Expression of Phospholipases B, C, and D in *C. albicans***

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*C. albicans*, is a major opportunistic pathogen in compromised individuals and its phospholipases have been associated with virulence. Objective: to examine the differential expression of the *C. albicans* phospholipase genes (PLB, PLC and PLD) in YPD and egg yolk agar Method: reverse transcription polymerase chain reaction (RT-PCR) was used (Schaller et al. Mol. Microbiol 1998; 29: 605-15). Results: When a total of 7 phospholipase positive (PL+; including ATCC 90028 strain) and 6 phospholipase negative (PL-) *C. albicans* strains were grown in YPD medium for 3-4 hours, the former expressed PLB1, PLB2, PLC1 and PLD1, while the latter expressed only PLB2 and PLD1. Furthermore, a single PL+ strain (HK4-Ra) expressed all four enzymes, when grown in both YPD and egg-yolk agar for five consecutive days indicating constitutive gene expression, as the growth substrate made no difference to enzyme expression. In another similar long term growth experiment a PL- strain which did not express PLB1 and PLC1 for four consecutive days, showed their delayed expression on the fifth day of incubation in both YPD and an egg-yolk-agar media. Conclusion: Ours is the first report to indicate simultaneous expression of all four PL genes of *C. albicans* in phospholipid substrates. Also, the data indicate that expression of various members of the phospholipase gene family of *C. albicans* is likely to be temporally regulated while some members such as PLB1 and PLD1 appear to be coordinately expressed, in tandem. (This work was supported by a grant from the Committee of Research and Conference Grants (Grant No. 10204225.19772.08011.323.01) of the University of Hong Kong, Hong Kong SAR.

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1:45 PM-3:45 PM, Thursday, 26 June 2003 Svenska Massan J1

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