Induction studies with Escherichia coli expressing recombinant interleukin-13 using multi-parameter flow cytometry - DTU Orbit (03/12/2018)

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The expression of interleukin-13 (IL13) following induction with IPTG in Escherichia coli results in metabolic changes as indicated by multi-parameter flow cytometry and traditional methods of fermentation profiling (O2 uptake rate, CO2 evolution rate and optical density measurements). Induction early in the rapid growth phase was optimal although this led to lower overall biomass concentrations and lower maximum specific growth rates. In contrast, induction in the mid-rapid growth phase was the most detrimental to cell quality as measured by cytoplasmic membrane depolarisation.

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