

Enhanced production of anti-cancer drug epothilones by lactose and sodium propionate in *Sorangium cellulosum* cultures

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We investigated effect of lactose on epothilones production. Although lactose has not effect on cell-growth, it has effect on epothilones production. In comparison with control fermentation, total epothilones production was increased when lactose was added at the death phase. However, epothilones B/A ratio was decreased.

Therefore, we added sodium propionate to the culture which is a precursor of methylmalonyl-CoA to increase epothilones B/A ratio. As a result, epothilones B/A ratio improve compared to control fermentation.

A final result, we confirmed that epothilones production was increased using lactose and epothilones B/A ratio was increased by sodium propionate.