

Proteom analysis of rat hepatic stellate cells under hyperglycaemia using two-dimensional electrophoresis

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Vitamin A and its metabolites are known to be essential for vision and to regulate diverse activities such as cell proliferation, differentiation, morphogenesis, and tumorigenesis.¹⁾ Hepatic stellate cell (HSC) of rat liver is the major storage site containing more than 80% of the vitamin A in the whole body.²⁾ To study the change on HSC's function under diabetic environment, we tested the ability of retinol uptake on the HSC cell line under the high glucose concentration. We cultured the HSC in 5 mM and 30 mM glucose concentration corresponding to the sugar concentration in the blood induced from the early and late diabetes mellitus. The changes of the retinoids contents on the HSC were analysed with the high performance liquid chromatography. In addition, we analysed the differential express patterns of diabetic induced HSC with the two-dimensional electrophoresis.

References

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