ISOLATION AND CHARACTERIZATION OF INSULIN RECEPTOR OF PLASMA MEMBRANES OF RAT LIVER CELLS AT MODEL OF TYPE 2 DIABETES

T. I. Halenova, M. Y. Kuznetsova, O. M. Savchuk, L. I. Ostapchenko

Taras Shevchenko National University of Kyiv, Ukraine
The insulin receptor was isolated from the liver cell membranes of control and diabetic rats. The protein purity was controlled by electrophoresis and Western blot. The tyrosine kinase activity of the insulin receptor was investigated in the incubation medium in the presence of insulin (concentration range: from $10^{-11}$ M to $10^{-5}$ M). The basal tyrosine kinase activity of the insulin receptor (in the absence of insulin) was equal for the control and diabetic state. Maximal tyrosine kinase activity of the diabetic and control insulin receptor was observed at the insulin concentration of $10^{-8}$ M. Results indicate that type 2 diabetes did not cause the irregularities in the functioning of the insulin receptor that could be the reason of insulin resistance.

**Key words**: insulin receptor, insulin resistance, type 2 diabetes mellitus.

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