Mol Biol (Mosk). 1993 May-Jun;27(3):608-17.

[Formation of gigantic mitochondria in human blood lymphocytes under the effect of an He-Ne laser]

[Article in Russian]

L E Bakeeva, V M Manteĭfel', E B Rodichev, T I Karu

PMID: 8316242

Abstract

A phenomenon of formation of giant mitochondria in lymphocytes after He-Ne-laser irradiation (56 J/m2, 5.6 W/m2) was discovered. Reconstruction of mitochondria from ultrathin sections through the whole lymphocyte showed that 1 h after the irradiation the number of mitochondria was reduced to 9-12 compared to 40-45 in the control cells. In the irradiated lymphocytes 2-4 branching giant mitochondria were revealed instead of small discrete mitochondria in the control cells. Other 6-7 mitochondria were found to retain their shape and volume. It is suggested that the giant mitochondria are formed by fusion of small mitochondria. Formation of giant mitochondria may reflect the increase in the energy exchange level.

Related information

MedGen

LinkOut - more resources

Other Literature Sources

The Lens - Patent Citations Database