

**THE POLYMORPHISM OF ND3, ND4L AND ND6 STRUCTURAL GENES OF MTDNA
AMONG RUSSIANS.**

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It was investigated three mitochondrial genes coding for NADH dehydrogenase: ND3, ND4L and ND6 from 63 peripheral blood samples of unrelated Russians. Within the mtDNA loci ND3, ND4L and ND6 we have found 19 polymorphic positions. Polymorphisms found at all three loci were transitions, with one exception for the transversion at position 14484 (ND6) The genetic diversity value for ND4L was found to be 0.208, for ND6 – 0.343 and for ND3 – 0.392. For the common ND3-ND4L-ND6 haplotypes the genetic diversity value was found to be 0.672. The data obtained show, that the investigated ND genes reveal much less polymorphism content than that of a mtDNA D-loop region, and therefore they do not seem to be of value as independent markers for identity testing. We have demonstrated that by using ND genes polymorphisms as additional markers to the mtDNA control region polymorphisms one can essentially increase discriminatory power of mtDNA typing for the purposes of individual identification analysis.