

DOSAGE OF ACTIVE RIBOSOMAL GENES IN HUMAN GENOME AND MULTIFACTORIAL DISEASES

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Abstract. The paper introduces to ribosomal genes (RG) which exists in human genome in multiple copies and code for ribosomal RNAs constructing ribosomes. Ribosomes are sub-cellular organelles which synthesize proteins on messenger RNA-matrices (mRNA). The number of ribosomes in the cells, and the intensity of protein synthesis depend on the number of RG copies in the genome. We found that expression and degree of pathology in individuals with inherited predisposition to multifactorial diseases depend on genome dosage of ribosomal genes.

Keywords: human genome, ribosomal genes, multifactorial diseases.