Full Paper

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Investigation of bacterial luminescence under the action of electromagnetic radiation of millimeter and infrared ranges

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Abstract

It is shown that exposure to electromagnetic radiation of millimeter and infrared ranges causes both stimulatory and inhibitory effect on bioluminescence strain Escherichia coli lum⁺. A comparative study of different modes of action of electromagnetic radiation on the reaction of bacterial luminescence has been performed. High sensitivity of biosensor to radiation has been revealed. Optimal modes of radiation to activate bioluminescence of test strain were established.