

Odpowiedź komórkowa bakterii kwasu mlekowego na stresy środowiskowe

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Lactic acid bacteria cellular responses for environmental stress

Summary

Lactic acid bacteria (LAB) constitute a heterogeneous group of bacteria that are traditionally used to produce fermented foods. The industrialization of food biotransformations increased the economical importance of LAB. The development of new applications such probiotic foods reinforces the need for robust LAB. They have to survive in the digestive tract, and express specific functions under conditions that are unfavorable to growth. A better understanding of the mechanisms of stress resistance and LAB cellular responses should allow to prepared these bacteria for industrial processes. Range of examples of different environmental stress, related genes and molecular mechanisms of the stress responses are presented.

Key words:

lactic acid bacterium, stress response, oxidative stress, heat shock, osmotic stress

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