

Special Issue

Stress Response Effectors and Strategies in Probiotics

Message from the Guest Editor

Probiotics are gaining increasing attention thanks to the health-promoting activities associated to their dietary intake, and to their occurrence and persistence in the gut microbiota. According to the specific type of stress, probiotic cells have been found to respond by i) up-regulating chaperones that stabilize, refold, and/or prevent precipitation of denaturing proteins; ii) producing proteolytic enzymes to degrade irreversibly damaged structures; iii) activating diverse detoxifying systems; and iv) modulating cell membrane lipid composition and surface adhesion properties. Insight into the molecular mechanisms carried out by probiotics to cope with stress shall increase our overall knowledge of the cellular strategies to overcome stress, thereby providing a paradigm for general cell stress response. Moreover, from a more applicative point of view, such studies may help to rationalize the use of beneficial microbes and to improve their efficacy. This Special Issue aims to collect original research articles and reviews covering recent advances related to the stress response mechanisms in probiotics.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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