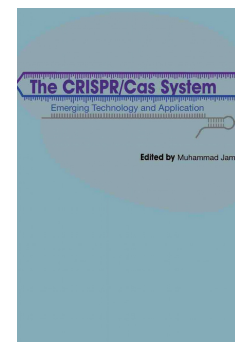


The CRISPR/Cas System

Emerging Technology and Application



Edited by: Muhammad Jamal

Huazhong Agricultural University, Wuhan, Hubei, China

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The use of CRISPR/Cas technology for genome editing suggests many potential applications, including the alteration of the germline of humans, animals and food crops. The speed and efficiency of the CRISPR/Cas system make it a potentially useful system for gene therapy.

In this volume expert international authors provide a useful and timely review of the applications of the CRISPR/Cas system across diverse fields and explore further avenues and research directions of this novel and powerful editing technology. The technology and its application are reviewed with respect to reproduction and development, immunity and genetic diseases, system structure and system specificity. Some of the potential problems of the CRISPR/Cas system are also discussed, in particular the specificity of the system: this remains an important topic as improvement could lead to the more direct and efficient use of the CRISPR/Cas system in clinical settings. The authors also debate ethical concerns associated with this powerful new technology.

This volume is a rigorous review of the applications and new opportunities for the CRISPR/Cas system and provides a stimulus for current and future research. An invaluable guide for all scientists working in the fields of genome editing and gene therapy the book is also recommended for all life sciences libraries.

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