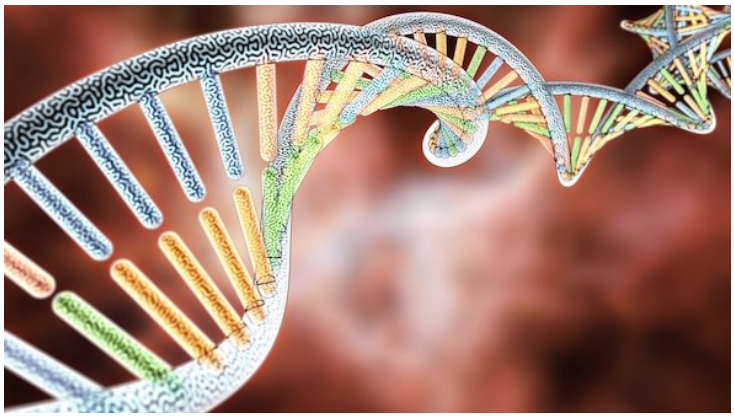
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ASIA EDITION

Japanese firm introduces new RNA editing technology

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The study opens up the possibility of editing gene mutations which could not have been the target with the existing technologies



EditForce, headquartered in Fukuoka, Japan, has realized the world's first RNA-editing technology that enables RNA-editing bases to be changed from "U" to "C," and demonstrated that this technology works even in human cells in a joint study with Professor Takahiro Nakamura, Faculty of Agriculture, Kyushu University.

The study opens up the possibility of editing gene mutations which could not have been the target with the existing technologies, and is expected to contribute to the R&D of therapies for various genetic diseases. EditForce will improve safety and editing efficiency in its development activities to establish innovative gene therapy technologies.

Currently, genome-editing technology has been developed rapidly, but the development of editing technology for RNA sequences remains limited.

Base-editing technologies can be applied to the treatment of diseases caused by a single mutation, and "U-to-C" RNA-editing technology of the study opens up the possibility to edit mutations which could not have been the target with the existing technologies. Further, repairing mutations by RNA editing without changes in genome sequence will enable EditForce to provide safer treatments to patients. The company expects that this technology will establish a novel gene therapy by improving safety and editing efficiency in its development activities.

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