C4U and CAT Bring CRISPR-Cas3 to Aquaculture

C4U Corporation (“C4U”) has announced a collaboration with The Center for Aquaculture Technologies (“CAT”), a leading provider of genetics solutions in aquaculture. Their joint effort aims to apply CRISPR-Cas3 technology to promote genome editing in major commercial fish species and drive forward technological advancements within the industry.

CRISPR-Cas3 technology was developed from the research work of Professor Tomoji Mashimo, currently at the Institute of Medical Science, University of Tokyo, who is also a co-founder of C4U, along with other contributions. The CRISPR-Cas3 platform provides unique advantages, such as increased safety through a reduction in unintended mutations and the capability for broad gene alterations near the target site. It stands out as an attractive option for genome editing, unencumbered by the intricate patents associated with CRISPR-Cas9, offering a practical substitute.

Akimitsu Hirai, President & CEO of C4U, commented on the ethos behind the formation of C4U, "our commitment through C4U—CRISPR for you—is to democratize this advanced technology, ensuring it is accessible for improving health outcomes and sustainable food production. The name C4U encapsulates our vision of bringing the benefits of CRISPR technology directly to the industries that need it most, from medical therapies to enhancing aquaculture's growth, aligning with CAT's mission to meet the global food demand responsibly."

The Center for Aquaculture Technologies is committed to delivering technologies that are not only innovative but also accessible to the aquaculture industry. This research initiative with C4U represents a stride towards fulfilling that commitment. At CAT, there's a firm belief that genome editing (GE) presents the most feasible and sustainable pathway to meet the world's increasing food requirements and to contribute to the economic vitality of the aquaculture sector.

John Buchanan, CEO of CAT, underscores this approach: "Our collaboration with C4U is a key part of our mission to introduce advanced genome editing technologies to aquaculture. We are invested in pursuing relationships that propel the industry forward, addressing the global food demand sustainably and responsibly."

About

C4U Corporation (C4U) is a privately held biotech company based in Osaka, Japan, and focused on the development of safe and efficient gene therapies for rare diseases, including pediatric, and
industrial applications based on its proprietary next generation CRISPR-Cas3 gene editing platform. The CRISPR-Cas3 technology platform is similar to CRISPR-Cas9 in terms of its engineering, efficiency, and delivery methods and has already been validated both in vitro and in vivo. It presents the distinct benefits of: (1) no off-target deletions (improved safety); (2) efficient knockouts of large, programmable gene sequences; and (3) entirely independent patent portfolio, which has been exclusively licensed worldwide to C4U by Osaka University for use in eukaryotic cells, thus simplifying sublicensing transactions in sharp contrast with the complex and heavily litigated CRISPR-Cas9 patent landscape.

The Center for Aquaculture Technologies (CAT) is at the leading edge of genetic innovation within the aquaculture industry. Employing strategies that are both result-oriented and designed for maximum value, CAT provides advanced genetic services that enhance profitability while upholding sustainable practices. The organization’s expertise spans genotyping, genomics, breeding, and genome editing, catering to an extensive range of aquatic species. The company’s integrated services support businesses of all sizes, accelerating growth, promoting environmental stewardship, and advancing the industry.

Contacts:
Katsuyoshi Akiyama, PhD, Director of Business Development (info@crispr4u.com)