Crispr/Cas9 Platform Developed Maize Mutant Library Covering 800 Functional Genes with CRISPR/Cas9 Technology

New York City, New York Apr 1, 2023 (<u>Issuewire.com</u>) - Crispr/Cas9 platform, the division of Creative Biogene, is founded and managed by a group of experienced biotech scientists, the company aims to help customers simplify and accelerate biomolecule research and development projects, and bring reliable and affordable research services to the community. Creative Biogene has extensive experience in molecular biology, antibody engineering, and custom assay development. Recently, Creative Biogene announced the release of its <u>maize mutant library</u> to accelerate the development of improved crops.

Creative Biogene, a world-leading biotechnology company focusing on genome editing, has extensive experience in plant transformation, crop improvement, and breeding. Using the latest CRISPR/Cas9 technology, scientists at Creative Biogene have successfully achieved efficient gene editing in a variety of plants, including Arabidopsis, rice, tomato, corn, tobacco, wheat, soybean, etc. Based on an excellent platform, Creative Biogene is able to provide precise gene knockout maize, and all maize mutants have been verified at the genome level by PCR and sequencing.

As one of the most important food, feed, and fuel crops in agriculture, increasing the yield of maize (Zea mays) will help meet our food production needs beyond current forecasts. It usually takes 8-10 years to develop superior varieties through conventional breeding methods. The breeding process can be sped up by using a genome editing technology called CRISPR-Cas9, reducing the time needed to just 2-3 years. Creative Biogene's professional plant genome editing team used CRISPR/Cas9 technology to develop a maize mutant library covering about 800 functional genes. In addition, Creative Biogene uses gene editing to improve agronomic traits (e.g., plant grain yield, nutrient content, disease resistance) and accelerate crop domestication.

The advantages of Creative Biogene's maize mutant lines include providing complete loss-of-function mutants (homozygous mutant lines), which are verified by Sanger sequencing. Approximately 800 premade corn mutant lines are also available for customer research to expedite the research process.

"Our maize mutant library covers homozygous, heterozygous, biallelic, and chimeric mutants created through CRISPR/Cas9 technology. Our prefabricated variant materials save you time and speed up the research process." said Marcia Brady, the marketing director of Creative Biogene, she also added, "In addition, we use the latest genome editing platform to provide genome-wide mutant library construction services for rice, Arabidopsis, tomato, tobacco, and other species."

About Creative Biogene

Creative Biogene, is a top-of-its-kind company that holds a leading position and is committed to accelerating the development of human science through biotechnology, offering innovative technologies, products, unique tools, and services for research discoveries and product development. With more than 10 years of experience and in-house experts, Creative Biogene has become a well-recognized industry leader to support researchers worldwide.

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