Editas Medicine and IDT Announce Publication in Nature Communications of Research Data Supporting the Use of Optimized AsCas12a Nuclease Variant, Alt-R A.s. Cas12a (Cpf1) Ultra, in Researching the Potential of Gene-Edited Cell Medicines

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CAMBRIDGE, Mass. and CORALVILLE, Iowa, July 29, 2021 (GLOBE NEWSWIRE) -- Editas Medicine, Inc. (Nasdaq: EDIT), a leading genome editing company, and Integrated DNA Technologies, Inc. (IDT), a leading comprehensive genomics research solutions provider, today announced the publication of research data demonstrating the advantages of Alt-R ™A.s. Cas12a (Cpf1) Ultra, an engineered AsCas12a nuclease variant, as a tool to eventually enable the development of gene-edited cell medicines. The findings were published in the journal *Nature Communications*.

"We are thrilled *Nature Communications* published this collaborative paper demonstrating the advantages of Alt-R A.s. Cas12a (Cpf1) Ultra using multiple pre-clinical models, which has enabled Editas to continue our research and development for gene edited cell medicines," said, Chris Wilson, Ph.D., Vice President, Lead Discovery, Editas Medicine. "Alt-R A.s. Cas12a (Cpf1) Ultra has shown to substantially improve upon the restricted target space and limited specificity of SpCas9, the most widely used Cas nuclease, and the low editing efficiency of wild type AsCas12a, creating what we believe to be a best-in-class nuclease with editing efficiency near 100 percent across sites in multiple cell lines and high on-target specificity. We believe this proprietary nuclease could have important applications in the development of novel therapies for serious genetic diseases such as sickle cell disease. In addition, we see significant opportunities to create engineered cell therapies for cancer."

"This exciting research demonstrates that Alt-R A.s. Cas12a (Cpf1) Ultra is a robust gene editing tool while maintaining our desired on-target specificity, making it ideal for complex genomic editing applications," said Chris Vakulskas, Director of Enzyme Evolution, IDT. "The on-target editing efficiency of Alt-R A.s. Cas12a (Cpf1) Ultra has great potential to expand the genome editing space, alleviate off-targeting editing concerns often observed with SpCas9 enzymes, and reduce the complexity of guide RNA manufacturing."

The published results detail a directed evolution in bacteria to identify a highly active AsCas12a mutant, Alt-R A.s. Cas12a (Cpf1) Ultra, and demonstrate the variant's superior on-target editing efficacy compared to Cas9 and AsCas12a. The paper summarizes several experiments of Alt-R A.s. Cas12a (Cpf1) Ultra that demonstrated dramatically elevated knock-out and knock-in efficiency in both cancer cell lines and in human primary cells such as hematopoietic stem and progenitor cells (HSPCs), induced pluripotent stem cells (iPSCs), T cells, and natural killer (NK) cells. Overall, the results support further research for the use of Alt-R A.s. Cas12a (Cpf1) Ultra as an advanced CRISPR nuclease with significant potential future applications.

About Editas Medicine
As a leading genome editing company, Editas Medicine is focused on translating the power and potential of the CRISPR/Cas9 and CRISPR/Cas12a (also known as Cpf1) genome editing systems into a robust pipeline of treatments for people living with serious diseases around the world. Editas Medicine aims to discover, develop, manufacture, and commercialize transformative, durable, precision genomic medicines for a broad class of diseases. For the latest information and scientific presentations, please visit www.editasmedicine.com.

About IDT
Integrated DNA Technologies, Inc. (IDT) develops, manufactures, and markets nucleic acid products for the life sciences industry in the areas of academic and commercial research, agriculture, medical diagnostics, and pharmaceutical development. IDT has developed proprietary technologies for genomics applications such as next generation sequencing, CRISPR genome editing, synthetic biology, digital PCR, and RNA interference. Through its GMP services, IDT manufactures products used by scientists researching many forms of cancer and most inherited and infectious diseases. IDT is widely recognized as the industry leader in custom nucleic acid manufacture, serving over 130,000 life sciences researchers. IDT was founded in 1987 and has its manufacturing headquarters in Coralville, Iowa, USA, with additional manufacturing sites in San Diego, California, USA; Research Triangle Park, North Carolina, USA; Leuven, Belgium; and Singapore. For more information, please visit www.idtdna.com.

Editas Medicine Forward-Looking Statements
This press release contains forward-looking statements and information within the meaning of The Private Securities Litigation Reform Act of 1995. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "target," "should," "would," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. The Company may not actually achieve the plans, intentions, or expectations disclosed in these forward-looking statements, and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in these forward-looking statements as a result of various factors, including: uncertainties inherent in the initiation and completion of preclinical studies and clinical trials and clinical development of the Company's product candidates; availability and timing of results from preclinical studies and clinical trials; whether interim results from a clinical trial will be predictive of the final results of the trial or the results of future trials; expectations for regulatory approvals to conduct trials or to market products and availability of funding sufficient for the Company's foreseeable and unforeseeable operating expenses and capital expenditure requirements. These and other risks are described in greater detail under the caption "Risk Factors" included in the Company's most recent Annual Report on Form 10-K, which is on file with the Securities and Exchange Commission, as updated by the Company's subsequent filings with the Securities and Exchange Commission, and in any other subsequent filings made by the Company with the Securities and Exchange Commission. Any forward-looking statements contained in this press release speak only as of the date hereof, and the Company expressly disclaims any obligation to update any forward-looking statements, whether because of new information, future events or otherwise.

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