

FOR IMMEDIATE RELEASE

OriGene Technologies and EdiGene Announce Joint Development of Genome Wide Knockout Cell Lysates

Novel CRISPR based approach to Revolutionize Western Blot Analysis and Antibody Specificity Validation

Rockville, MD – November 21, 2016 – OriGene Technologies, the industry's largest supplier of genecentric research tools, today announced that it has entered into a multi-year strategic agreement with EdiGene (Beijing, China) to develop genome wide knockout cells from commonly used laboratory cell lines. This joint adventure combines EdiGene's technical expertise in genome editing technology and OriGene's extensive market reach to serve the research community. With its high capacity technology platform, EdiGene has started large-scale production of the industry's first attempt to create a genomewide gene knockout cell library. The first product line that OriGene has introduced is the Knockout Cell Lysate, a new category of protein products, which can be used to validate antibodies for specificity or used as high quality negative controls for Western blot analysis.

Performance and specificity are critical for antibodies to be used effectively in research, diagnostic and therapeutic applications, yet reagents to validate antibody specificity are currently lacking. The Knockout Cell Lysates from OriGene are specifically designed to drastically improve the process by which antibody performance is verified and target specificity is confirmed by scientists.

Introduction of the Knockout Cell Lysates follows OriGene's previous announcement to develop and deliver to the industry leading technology solutions such as its 10K High Density Protein Microarray Platform and UltraMAB[™] Antibodies featuring extensive validation, "mono-specificity" characteristics and guaranteed no cross-reactivity as determined by protein microarray technology for use in IHC applications and immunoassays.

KO Cell Lysate Overview:

Derived mostly from HEK293T and HeLa cell lines, EdiGene KO Cell lysates have been optimized through the use of genome editing technology and validated at the genomic level through PCR and Sanger sequence techniques to ensure the accuracy and knockout of the target gene. Each KO Cell Lysate product is sold in kit format consisting of a KO Cell lysate and a Parental cell lysate, which are immediately available from OriGene to the academic and industrial research markets.

"The introduction of novel tools such as the Ready-Made Knockout Cell Lysates has the potential and power to completely revolutionize Western blotting and improve the current state of product quality for the wider Antibody Industry. OriGene's continued pursuit of best in class technologies for improved antibody validation and specificity determination further underscores our long-term commitment to becoming a leading producer of antibody products. Through our unique relationship with leading companies like EdiGene, we now have the ability to transform biological research through the delivery of Knockout Cell Lysates and use of leading technologies such as CRISPR" stated Dr. Wei-Wu He, CEO, OriGene Technologies.

In a related statement, Dr. Wensheng Wei (CSO & Founder, EdiGene) commented *"We are excited about the collaboration between EdiGene and OriGene that combines the high-quality KO cell line products from EdiGene as a leading Genome Editing company in China and the worldwide distribution channel of OriGene as one of the leading reagent companies. The adaptation of KO validation in the antibody reagent industry and the scientific research community will redefine antibody quality and improve the accuracy and reproducibility of experimental results using antibodies."*

Additional information about the KO Cell Lysates and the CRISPR product line from OriGene is available at <u>www.origene.com/CRISPR-CAS9</u>.

About OriGene Technologies

OriGene Technologies, Inc. is a gene centric life sciences company dedicated to support academic, diagnostic, pharmaceutical and biotech companies in their research of gene functions and drug discovery. OriGene's novel product line includes the world's largest cDNA and shRNA clone collections, ready-to-use Lenti particles, over 12,000 purified human proteins produced from mammalian (HEK293) cells, over 50,000 high quality primary antibodies including TrueMAB[™] mouse monoclonal antibodies and polyclonal antibodies made against full-length proteins for the conservation of native epitopes, validated "mono-specific" monoclonal antibodies called UltraMAB[®], which offer a unique solution to the critical issue of antibody specificity, >140,000 highly validated human tissues, and protein microarray products and services. For more information, visit <u>www.origene.com</u>.

About EdiGene Inc.

EdiGene Corporation is dedicated to the development of genome editing technology for human health. Genome editing technology enables the targeted modification of genetic information in human cells, including gene knockout, knock-in and targeted mutations. We aim at providing high quality products and services for patients, pharmaceutical industry, diagnostic industry and scientific research community. EdiGene produces stable genome edited mammalian cell lines serving a wide-range of R&D activities in areas of basic research, diagnostic and therapeutic development. EdiGene's *Ready-Made KO Cells* are utilized as Reference Standards in antibody KO validation for high quality antibody QC, as well as in diagnostic products. EdiGene provides *Custom Genome Editing Service* and CRISPR/Cas9 based *High Throughput Genetic Screening Service* to identify genes related to drug-sensitivity, drug-resistance, and synthetic lethality, and to accelerate drug discovery and clinical trials. For more information, visit www.edigene.com.

CONTACT:

Mark E. Watson OriGene Technologies, Inc. Business & Corporate Development Phone: (240)620-0235 Email: <u>businessdev@origene.com</u>