Scientists from Peking University, China and OriGene Technologies jointly published that multiple lineage specifier genes can replace OCT4 and SOX2, the core regulators of cell pluripotency. The authors further proposed a “seesaw model” to illustrate the complex process of the pluripotency state and lineage specification. The results were published in the May 23rd issue of Cell, titled “Induction of Pluripotency in Mouse Somatic Cells with Lineage Specifiers”.

OriGene’s cDNA clone collection was a critically important tool in this research. The authors performed high throughput functional clone screening using this collection of expression clones in a GFP-based reporter assay and quickly identified lineage specifiers as substitutes for OCT4 during reprogramming. The publication demonstrated the power of OriGene’s collection of high quality expression cDNA clones in the systematic screening of key gene regulators in a biological process.

“The collaboration with OriGene and the accessibility of this cDNA clone collection greatly accelerated our research.” said Dr. Hongkui Deng, the senior author of the article. “The results of this research will provide novel insights to our understanding of the balance between pluripotency and lineage determination.”

“OriGene is proud to be a contributor to this exciting research. After many successful applications of our clone collections in making novel discoveries, this study once again provides another proof-of-principle of using a large collection of over-expression cDNA clones to decipher gene functions.” said Dr. Youmin Shu, VP of R&D at OriGene. “We are excited that scientists are taking advantage of such collections. We believe this methodology will become routine for future discoveries.”

OriGene’s TrueClone collection of over 20,000 unique cDNA clones has empowered multiple pioneering groups to discover novel genes in major pathways through genome-scale biology. The Cell publication further validated the value of the TrueClone collection. The comprehensiveness of the collection and the expression-readiness of the cDNA clones make it the ideal source for high-throughput functional screening.

About OriGene Technologies

Since 1996, OriGene has been dedicated in creating TrueClone, the largest full-length cDNA collection for gene function study. OriGene’s flagship products are the TrueClone Collection, a searchable source of over 33,000 human full-length cDNA clones suitable for transfection and protein expression and TrueORF clones of over 25,000 tagged human ORF clone. With the comprehensive cDNA clones as foundation, OriGene has created the multiple unique research tools, including the largest offering of 8,000 recombinant proteins made from human cells, 6,000 TrueMAB monoclonal antibodies made with full-length human antigens. More
information about OriGene Technologies can be found at the company’s website http://www.origene.com/.

For additional information regarding this announcement, please contact:

Youmin Shu, Ph.D.
240-620-0240
VP, Research and Development
OriGene Technologies
Contact Information
Xuan Liu
OriGene Technologies
240-620-5785