

Cellecta, Inc. 320 Logue Ave Mountain View, CA 94043 www.cellecta.com 650-938-3910

CELLECTA, INC. Announces Launch of Human Whole Genome CRISPR Knockout Library

MOUNTAIN VIEW, Calif., July 30, 2015 /PRNewswire/ -- Cellecta, Inc., a U.S.-based provider of products and services for gene function analysis and biomarker discovery, announced the release of its pooled CRISPR Guide RNA (sgRNA) Knockout Library targeting all human protein coding genes. CRISPR technology enables researchers to specifically and permanently "knock out" a gene's function. Cellecta's new Human Whole Genome CRISPR Knockout library provides a high throughput screening tool so that researchers can investigate in a single experiment how human cells respond to the disruption of each gene across the whole genome.

Cellecta is the first company to produce a lentiviral based CRISPR library that targets all of the almost 20,000 protein encoding genes in the human genome. While limited amounts of CRISPR libraries made in academic labs are currently available to some researchers, the small amounts provided require weeks of preparative work before the libraries can be packaged as viral particles and used for gene knockout screens. Cellecta uniquely offers large enough portions of the library for immediate viral packaging. In addition, Cellecta is the only provider to offer the library as pre-packaged lentiviral particles that can be used for a knockout screen immediately on receipt.

Cellecta's library was designed as three modules each targeting approximately a third of the human genome with eight sgRNAs per gene, which is a higher number than most other libraries use. In addition, the sgRNAs in Cellecta's library incorporate improved design features that increase their effectiveness and they have been filtered to ensure they are unique for each gene target to minimize false positive results.

Depending on the needs of the experiment, each of the three CRISPR Library modules can be used separately or combined for a single genome-wide knockout screen. The modular format is similar to Cellecta's Human Genome-Wide shRNA Library, and each of the CRISPR and RNAi Library modules target the same sets of genes so that investigators can more easily make use of both techniques for genome-wide loss of function screens.

"Our intention is to provide a high quality tool to help accelerate the understanding of which genes play key roles in biological responses and disease pathology." said Alex Chenchik, the founder and Chief Scientific Officer of Cellecta. "As has been shown by recent publications and in-house screening work we have done," he continued, "CRISPR mediated knockout provides a powerful approach for these type of screens and we developed this genomewide library to enable more researchers to utilize this new technology."

About Cellecta:

Cellecta, Inc., a leading provider of genomics products and services, focuses on RNAi and CRISPR technologies for the discovery and characterization of novel therapeutic targets, and genetic profiling for biomarker discovery. The well-cited functional genomics portfolio offers gene knock-out and knock-down screens, custom and genome-wide RNAi and CRISPR libraries, cell engineering, RNAi and CRISPR construct services, and mutation and expression profiling of cancer samples.

Contact:

Paul Diehl, Ph.D.
Director, Business Development
Cellecta, Inc. | 320 Logue Ave | Mountain View, CA 94043
T: (650) 938-4050 | F: (650) 938-3911
pauld@cellecta.com
www.cellecta.com