Cellecta, Inc. Launches DriverMap™ Adaptive Immune Receptor (AIR) Assay to Provide Greater Insights into Immune Repertoire Diversity by Profiling T-Cell and B-Cell Receptor Variability in Genomic DNA

New DriverMap™ AIR-DNA assays complement current AIR-RNA technology to provide a more comprehensive and precise picture of the diversity and antigen-activation response from all seven human T-cell receptor (TCR) and B-cell receptor (BCR) chains.

MOUNTAIN VIEW, CA—(PR Newswire)—Apr. 12, 2023—Cellecta, Inc. today announced the launch of the DriverMap™ Adaptive Immune Receptor DNA (AIR-DNA) TCR and BCR kits which provide rapid, single-tube PCR-based assays to analyze the genomic diversity of receptors from T-cells or B-cells from a wide range of sample types, including whole blood, tissue biopsies, FFPE and more.

The multiplex-PCR assays profile the variations of the four T-cell receptor (TCR) or three B-cell receptor (BCR) chains present in the genomic DNA of immune samples. The assay results are obtained through next generation sequencing and provide important information on the abundance and diversity of T- or B-cell clonotypes in each sample. This type of quantitative analysis is essential for understanding immune system responses to pathogen infection, tumorigenesis, drug/vaccine treatment, and related processes, and it provides the basis to identify new strategies for assessment of vaccine efficacy, biomarker discovery, and immune-based cancer treatments.

The new AIR-DNA assay complements Cellecta's current DriverMap AIR-RNA assay. Combined profiling data from both the AIR-DNA and AIR-RNA assays can provide valuable information on specific receptors and clonotypes that are activated in response to particular antigens.

"We are pleased to introduce the DriverMap AIR-DNA assays, which along with our AIR-RNA profiling assays provide researchers with more effective tools for immune receptor repertoire profiling. No other assay on the market today allows for the comprehensive, accurate and quantitative data that are obtained from the DriverMap AIR-DNA and AIR-RNA assays," said Alex Chenchik, Ph.D., president and chief scientific officer of Cellecta.

"The DriverMap™ AIR-DNA assay for immune receptor repertoire profiling, especially when used in conjunction with the other DriverMap AIR-RNA and Targeted RNA-Seq Expression Profiling assays, will be of great benefit to scientists looking to develop new immunology-based strategies for translational research and precision medicine. The deep insights provided by these easy-to-run, quantitative assays show great promise for applications such as identifying mechanisms of action and discovering potential new therapeutic targets, added Vladislav Golubkov, Ph.D., vice president, Cureline Molecular Services.

The highly reproducible and sensitive Driver-Map™ AIR-DNA and AIR-RNA assays offer important improvements over competitor offerings currently available on the market, including:

 Comprehensive, cost-effective profiling of all TCR and BCR isoforms starting from either DNA and/or total RNA for immune receptor repertoire coverage of abundant clonotypes--including antigen-activated clonotypes--from whole blood, PBMC, FFPE, tissue or purified immune cells.

- Reproducible, quantitative analysis of functional, productive, abundant AIR clonotypes using universal molecular identifier (UMI) technology.
- Specific profiling of AIR repertoire without background of primer-dimer and offtarget amplification products, with no need of specialized equipment.

In addition to offering the DriverMap AIR-DNA and AIR-RNA kits, Cellecta continues to provide the DriverMap AIR-DNA or AIR-RNA Profiling assays as a service. Researchers send Cellecta or special contract laboratories their immune cell samples and receive back quantitative clonotype data with an analysis report generated by MiXCR software in as little as a few weeks.

For more information on the technology and products, including introductory pricing, visit www.cellecta.com/DriverMapAIR or email info@cellecta.com

## About Cellecta:

Cellecta, Inc., a leading provider of genomic products and services, is an industry leader in RNAi and CRISPR technologies for the discovery and characterization of novel therapeutic targets, and genetic profiling for biomarker and drug discovery.

Cellecta, Inc. is headquartered in Mountain View, California. Further information is available at <a href="https://www.cellecta.com">www.cellecta.com</a>

## Cellecta, Inc.

Paul Diehl, 650-938-4050 pauld@cellecta.com

or

Media: Ruth Mercado, 650-938-4080 rmercado@cellecta.com