

xCELLigence Functional Potency Assay

Label-free, real-time, sensitive, robust, reproducible, 21CFR Part 11 compliant

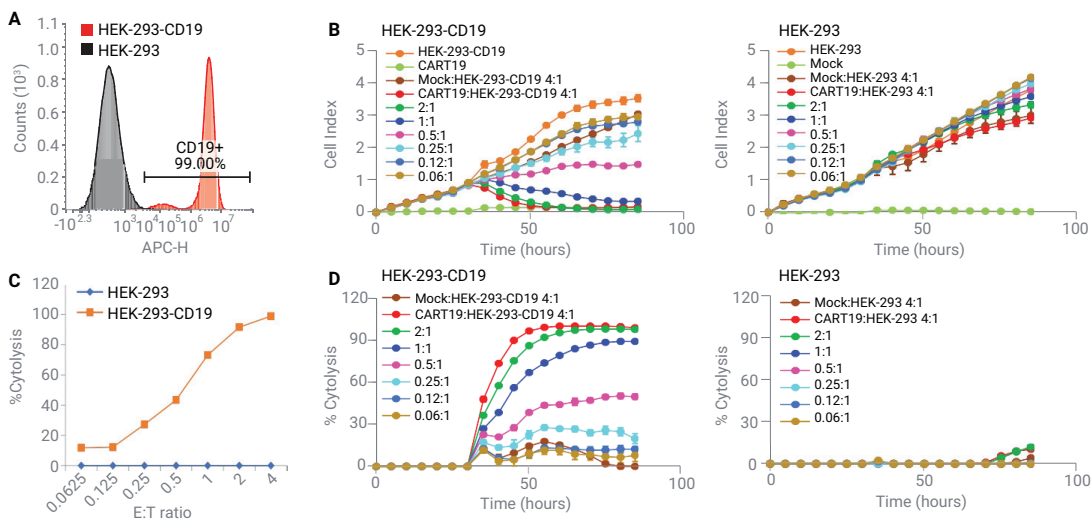


Pharmaceutical companies need to develop reliable methods for product quality inspection to shorten the period of product release. To evaluate the efficacy of cell therapies, various *in vitro* methods have been developed, such as luciferase, lactic dehydrogenase (LDH), cytokine detection, and flow cytometry. However, all these methods require cell labeling, are labor-intensive, and only provide information about the cytotoxic effect of products at a selected time point. Agilent xCELLigence technology offers a label-free, real-time measurement of the immune-cell-mediated killing of cancer cells that is accurate and reproducible, and which satisfies the needs of analytical development in cell therapy manufacturing.

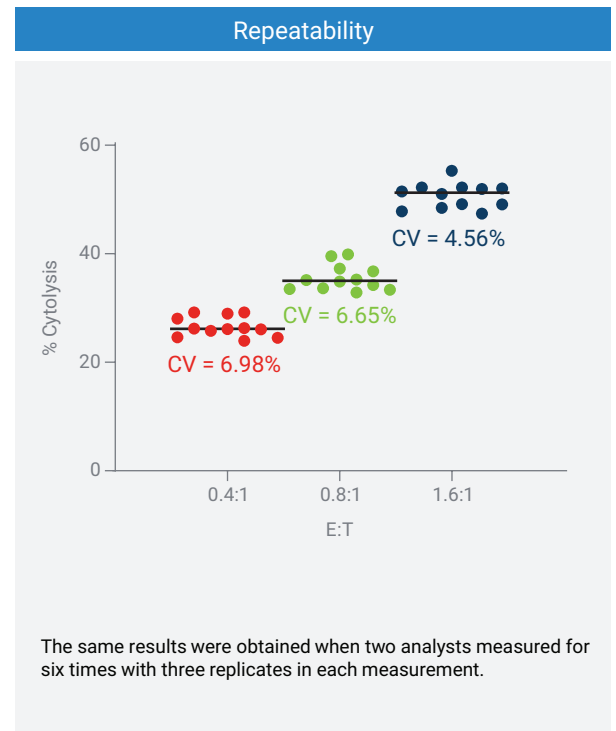
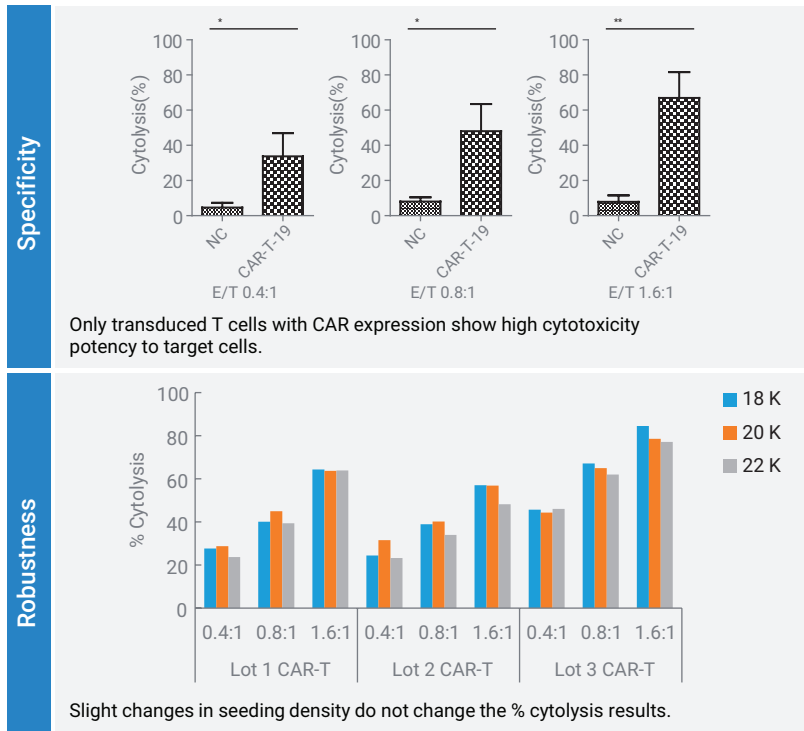
xCELLigence: a robust potency assay you can trust from discovery, process development to manufacturing QC release

- Small footprint
- 21CFR Part 11 compliance
- 16, 96, and 384-well format and HT options
- Convenient and simple workflow
- Automated data output and analysis
- Simple maintenance and calibration
- IQ/OQ/PQ and CSV service
- Over 4,800 peer-reviewed publications
- Highly cited by thought leaders in cell therapy
- Recommended by top cell therapy CRO/CDMO
- Adopted by leading cell therapy companies
- For both adherent and liquid tumor types

Evaluation of cytolytic activity of CART19 with xCELLigence



xCELLigence potency assay validation



Selected testimonials

"As a CRO, the xCELLigence RTCA MP (multi-plate) version is the workhorse of the over 80 to 90 CAR T and CAR-NK projects already completed. The real-time kinetic readout has accelerated the patent and IP positions of many of our clients. The ease-of-use is also wonderful. Plate cells, 24 hours later add compound or CAR T, and walk away for the next 80 hours, leaving our scientists to continue all their other experiments. I can attest to the fact that xCELLigence MP data have been very predictive in animal models and have led to clinical study initiation in just 9 months from the first experiment."

John Wu, PhD, CEO, ProMab Biotechnologies

"Bio-gene used Agilent's xCELLigence Real-Time Cell Analysis (RTCA) label-free platform for real-time release testing (RTRT). This technology can automatically detect cells in the whole process without labeling cells, which can greatly reduce the manual operation steps, and ensure the objectivity, accuracy, and integrity of experimental data. This scheme can more accurately evaluate the biological characteristics, efficacy, or potency of the product. More importantly, it can continuously detect the dynamic changes of cells in several hours or even dozens of days in real time."

Ding Wen, Director of Clinical Production Department, Bio-gene

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