



## Cell Mediated Cytotoxicity -

*still suffering from laborious and insufficient assays?*

## Screen More, Screen Faster with Optimal Instrumentation.

Imagine a system that ...

- runs up to 576 experiments in parallel,
- delivers online monitoring of cytopathic effects,
- works label-free, under physiological conditions,
- with full kinetics in real-time - and
- demonstrates it's qualities in more than 1000 publications...

It's here:

- xCELLigence Realtime Cell Analyzers are the systems of choice assessing **immune-mediated tumor cell killing**.
- Label-free and full kinetics read-outs for **medium to high throughput screening** by a sensitive and reliable technology based on impedance from the industry leader.
- Cytotoxicity assay workflow under **physiological conditions** allowing **prolonged incubation** up to several days.

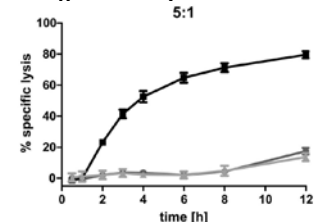
It works. Peer-reviewed publications (*examples*):

- *Peper JK et al. Journal of Immunological Methods 2014.* An impedance-based cytotoxicity assay for real-time and label-free assessment of T-cell-mediated killing of adherent cells. doi: 10.1016/j.jim.2014.01.012
- *Seidel UJE et al. Frontiers in Immunology 2014.*  $\gamma\delta$  T cell-mediated antibody-dependent cellular cytotoxicity with CD19 antibodies assessed by an impedance-based label-free real-time cytotoxicity assay. doi: 10.3389/fimmu.2014.00618
- *Erskine CL et al., Journal of Visualized Experiments 2012.* URL: <http://www.jove.com/video/3683/>. Determining optimal cytotoxic activity of human Her2neu specific CD8 T cells by comparing the Cr51 release assay to the xCELLigence system.

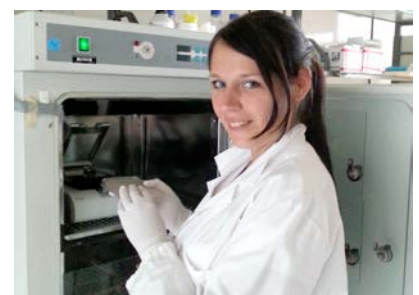
It's your turn. Optimize your Cytotoxicity Assays now.

Get in touch with our experts and learn more about xCELLigence : [ols-bio.de/car-t](http://ols-bio.de/car-t)

Example: Cytolytic activity of  $\gamma\delta$  T cells in xCELLigence assays



$\gamma\delta$  T cells were added to MCF-7-CD19tm cells in 96-well E-plates at different E:T ratios. Impedance was measured every 15 min for > 12h. Cytolytic activity was calculated as percentage of specific lysis. More details: *Seidel et al., frontiers in IMMUNOLOGY*, doi: 10.3389/fimmu.2014.00618



**J. Peper, IFIZ Tübingen, Abt. Immunologie:**

„We've searched an alternative to CRA, ideally without the need for using dyes or being limited by endpoint-assays. xCELLigence turned out to be most suitable and easy to install. We now achieve an effector to target ratio of 0.05 : 1, evaluate complete kinetics and even might use effector cells in further experiments“

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