

Measure the binding of molecules to membrane targets on cells

## Real-Time Interaction Cytometry (RT-IC)

Characterize interactions involving antibodies, receptors, and membrane targets where they matter most: **in their native environments**.

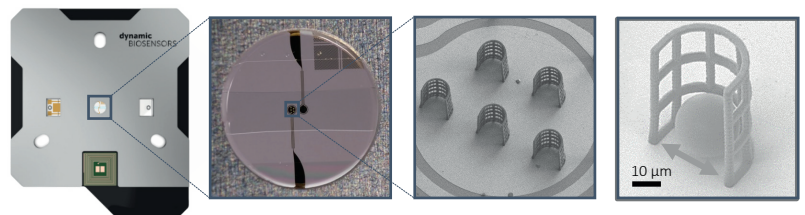
- Native transmembrane domain folding
- Native target density
- Target mobility in fluid membrane
- Native co-interactions

Automated analysis of **binding kinetics**, **affinity**, and **avidity** on cells:

- Association rate constant  $k_{on}$
- Dissociation rate constant  $k_{off}$
- Binding stability / half-life  $t_{1/2}$
- Dissociation constant  $K_d$



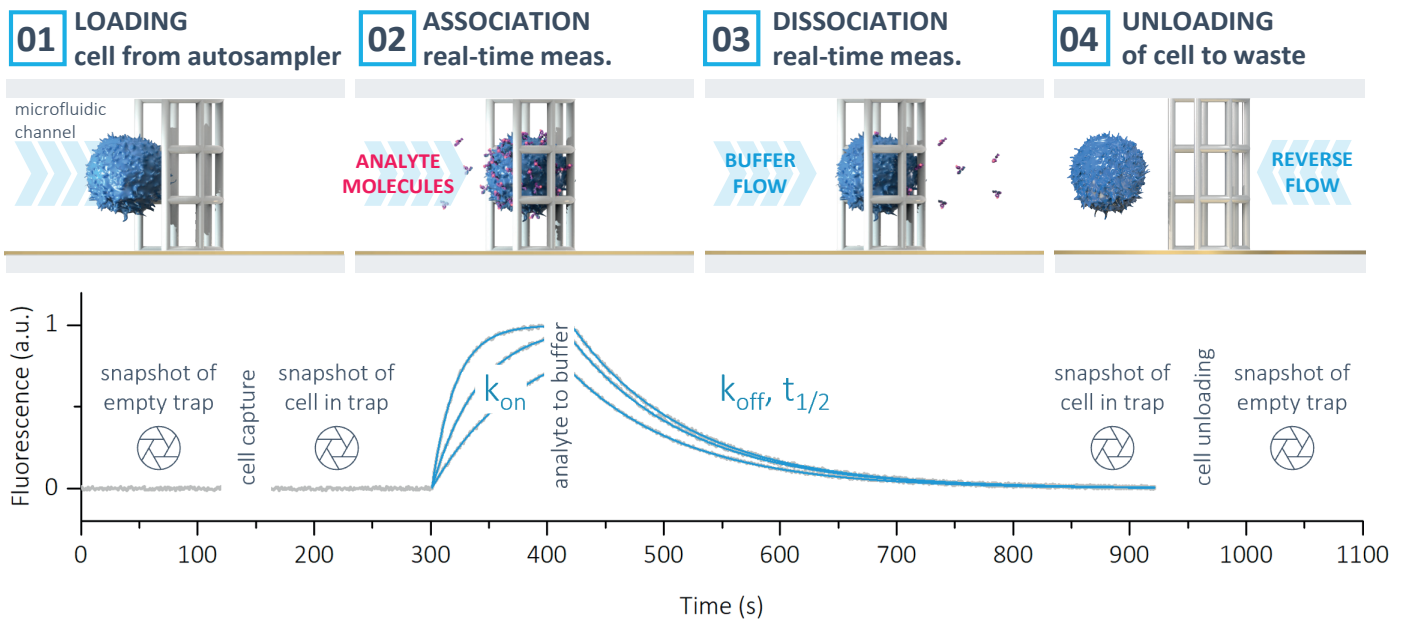
heliXcyto  
instrument



heliXcyto chips feature flow-permeable, bio-compatible polymer cages, which physically retain any type of cells. Trap sizes are tailored to capture single cells.

## RT-IC measurement principle

for the automated analysis of  $k_{on}$  and  $k_{off}$  binding rates on cells



## Features

### Easy-to-use

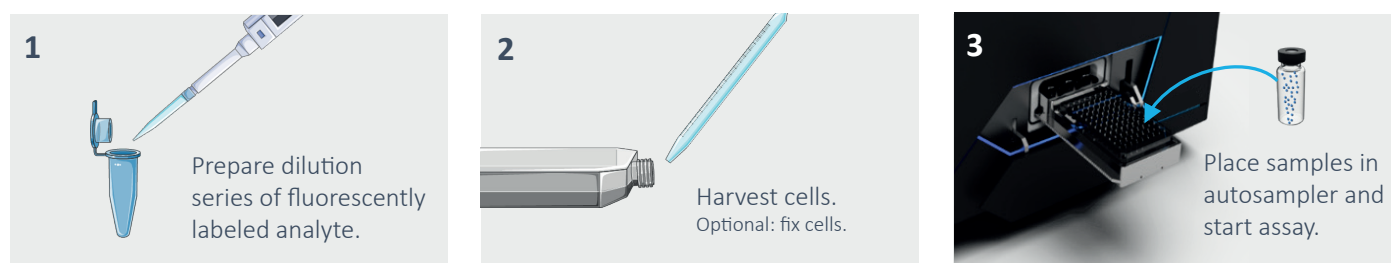
- Automated workflows
- Applicable to any cell type, living or fixed
- Compatible with complex media
- Built-in microscope for visual inspection of cells

### High sensitivity

- Single & multiple cell analysis
- Low membrane protein expression levels
- Ultra-sensitive fluorescence detection
- High performance microfluidics for resolving fast and slow kinetics

## Hands-on workflow

from cell culture to interaction data in three simple steps



Hands-on time: approx. 30 min.

## Applications

in immuno-oncology, cell therapies, and many more

### Biologics development

On-cell characterization of mono- and multi-specific antibodies, and other biologics.

### Adoptive cell therapies

CAR-T cells, TCR engineering, NKs, new CMC modalities.

### New targets

Biophysical analysis of so far inaccessible cell surface receptors (GPCRs, ...).