

clean cells

SOLUTION FOR BIOLOGICS

SMART ADCC EFFECTOR CELLS:

STANDARDIZATION OF ADCC IS MUCH EASIER

Clean Cells and INSERM⁽¹⁾ developed an exclusive engineered cytotoxic T-cell bank, genetically modified to express human CD16, this is our Smart ADCC effector cells used for Antibody Dependent Cell-Mediated Cytotoxicity assay.

The Smart ADCC effector cells combine two unique features:

- CD16 expression confers the true lytic activity of ADCC, with intense and consistent lysis level on target-expressing cells and minimal background lysis.
- The Smart ADCC effector cells can be amplified and stored as large cell banks (up to 500 vials) so that they can be used in a convenient easy-to-use format.

→ This unique combination allows to reach the highest level of reproducibility in ADCC assays.

STAY FOCUSED ON YOUR ANTIBODY

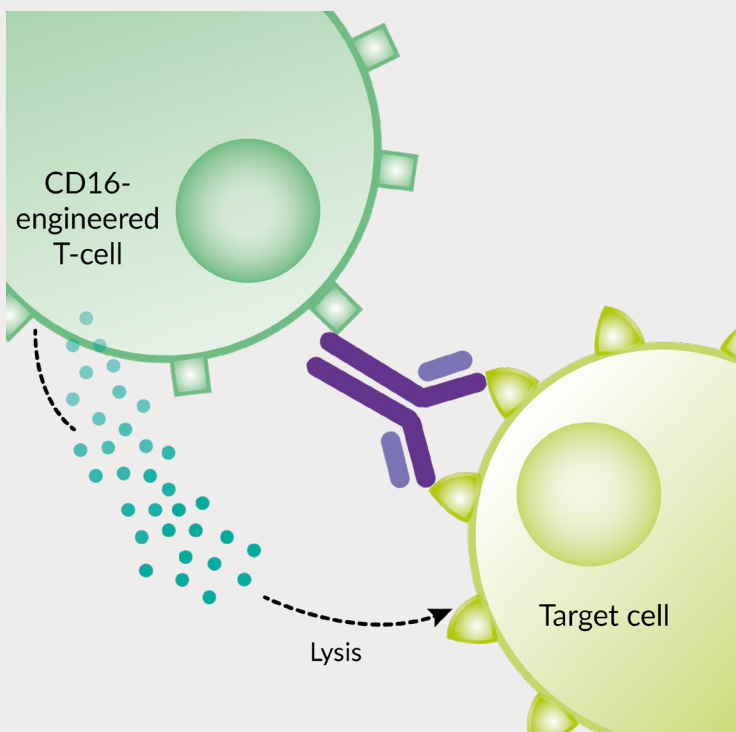


KEY ADVANTAGES

- Consistent
- Safe
- Reliable
- Specific
- Sensitive
- Flexible

APPLICATIONS

- Screening of drug candidates and antibody ranking
- Characterization of originator or biosimilar antibodies
- Potency testing for lot release



Clean Cells can develop the bioassay for your product

Customized assay development
Luminescent approach
Validated assay (ICHQ2R1)

Clean Cells can deliver vials for your own use

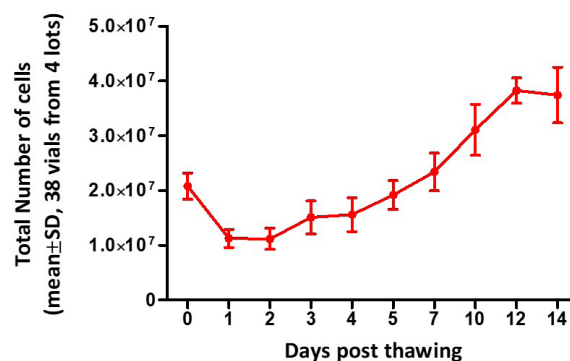
Single vials or dedicated standardized batch
Custom support

⁽¹⁾References: B. Clémenceau et al., Blood 2006, 107:4669 ; A. Rossignol et al., mAbs 2017 9:521

EASE OF USE: READY-TO-USE SMART ADCC EFFECTOR CELLS

•Simple thawing procedure

•**Extended period of use:** The Smart ADCC effector cells have a lifespan of more than 14 days upon thawing. Under the provided culture conditions, they expand during this period in culture. While the Smart ADCC effector cells can be used immediately after thawing, it is recommended to thaw them at least 24h before use for their optimal recovery and activity.



HIGHLY PERFORMANT AND FULLY CHARACTERIZED SMART ADCC EFFECTOR CELLS

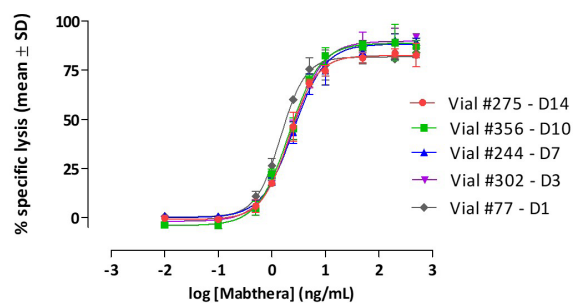
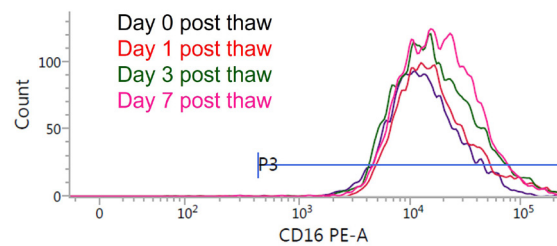
•**Consistent:** The Smart ADCC effector cells show stable expression of CD16 during the culture.

•**Reliable:** Each batch is released based on pre-defined functional parameters (viability and cytotoxicity) and the different vials display highly reproducible activity.

•**Sensitive:** The Smart ADCC effector cells have an intense lytic activity, which results in a large analytical window. As a consequence, the detection of subtle differences between antibody batches (eg. fucosylation level) is easier especially when compared to PBMC-based ADCC measurement.

•**Safe:** Each batch of Smart ADCC effector cells is tested for the absence of bacteria, fungi, yeast, mycoplasma and human viruses (HIV1, HIV2, HTLV1, HTLV2, HBV, HCV, EBV and CMV). A certificate of analysis is provided.

•**Available for long term studies:** Each batch up to 500 vials allows to perform multiple experiments, including longitudinal studies covering several years (e.g. comparative characterization of different batches of an antibody, stability studies).



Five vials of a single batch of Smart ADCC effector cells were thawed at different time points (from day -14 to day -1), maintained in culture during the corresponding time and tested for ADCC activity in a single experiment using the MabThera® model.

