

Just as Sensitive as [3H]-thymidine

EpiScreen® 2.0 delivers on the essentials with sensitivity comparable to traditional [3H]-thymidine assays, but without any need for radioactive markers.

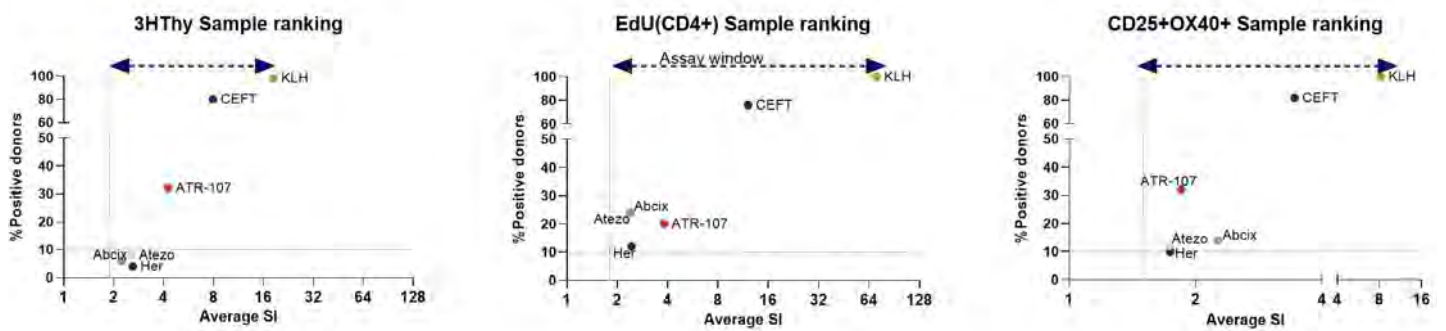


Figure 1. EpiScreen® 2.0 EdU readout has a wider assay window than [3H]-thymidine, offering better ranking of immunogenicity. The activation-induced markers CD25 and OX-40 help to pinpoint samples with higher risk of immunogenicity (early responses). Graphs show average stimulation index (SI) for positive responding donors vs % positive donors.

Proliferation and activation responses in PBMC (non-CD8 ⁺ depleted)				
Sample	% Response ³ H-Thy	% Response EdU	% Response CD25/OX-40	Expected ADA (%)
Abciximab	6	24	14	6-44
Atezolizumab	8	22	12	13-36
ATR-107	32	20	32	76 (37.5*)
CEFT	80	76	82	70-90
Herceptin®	4	12	10	10
KLH	98	100	100	90-100

Table 1. EpiScreen® 2.0 EdU readout has comparable sensitivity to [3H]-thymidine, including for clinically relevant samples with high reported ADA rates. The addition of CD25/OX-40 activation marker status improves sample ranking.

*Reported response in vitro



Monitor Specific CD4+ and CD8+ T-cell Behaviour

EpiScreen 2.0 specifically assesses CD4+ T-cell proliferation via flow cytometry, giving you more relevant information than a bulk readout. Furthermore, it allows you to monitor other cell populations as well, such as CD8+ activation, giving insight into the mechanism of action – particularly useful for gene therapy where vectors can enter an indirect antigen processing pathway.

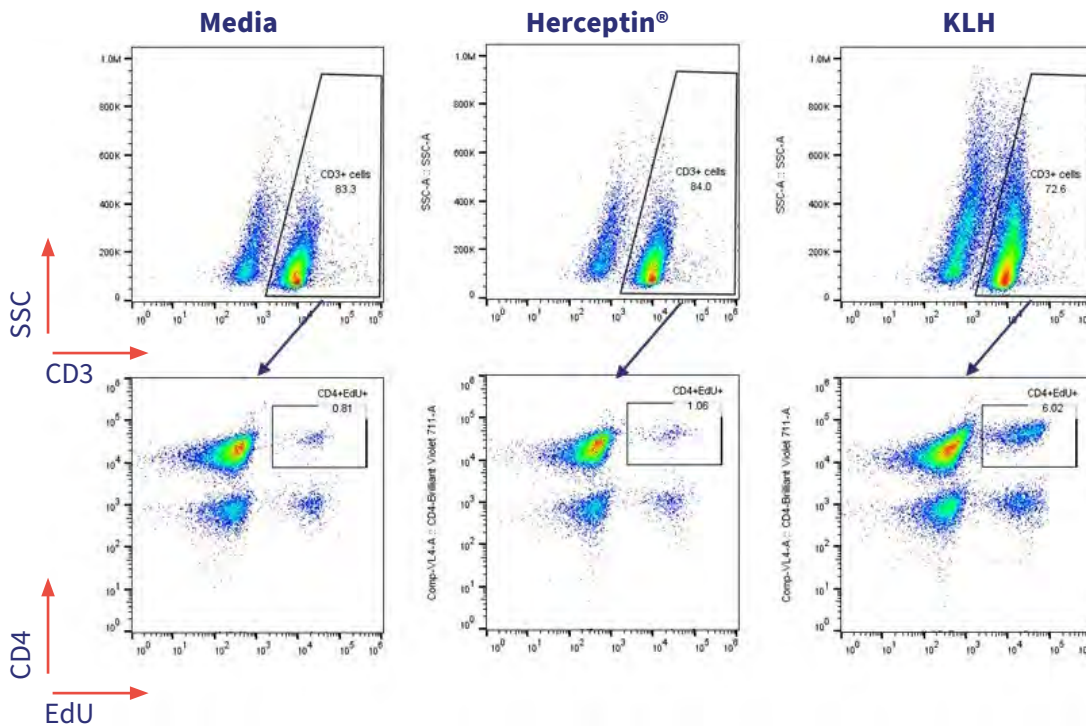


Figure 2. Using EpiScreen® 2.0 to monitor CD4+ T-cell proliferation. Flow cytometry gating strategy to determine EdU+ cells in response to Media, Herceptin® (low immunogenicity control), and KLH (high immunogenicity control).

Customize and Assess Activation Markers

With sensitivity and proliferation covered, EpiScreen® 2.0 also allows you to look at activation markers, giving you more detailed information on the triggered response and confirming the activation of specific T-cell populations. With EpiScreen® 2.0 you can also customize your selection of cell-surface markers or assess cytokine release:

- Extend cell-surface markers to monitor other cell populations or activation mechanisms of your choice (up to 3).
- Assess cytokine release by Luminex xMAP or FluoroSpot. Standardized or fit for purpose cytokine analysis to assess PBMC responses to a given drug candidate, which can improve the interpretation of immunogenicity risk.

Better Immunogenicity Testing

To avoid issues later in the drug development process, you need to start smart. That means you need more data-rich assays at the start of your project. EpiScreen® 2.0 allows you to assess immunogenicity via flow cytometry focusing on specific cell proliferation, alongside customizable activation markers, without ever compromising on assay sensitivity.

EpiScreen® 2.0 gives you better immunogenicity testing, which means better, more granular, candidate selection with fewer potential problems later down the line. Start smart, progress fast.

EPISCREEN® 2.0 TIME COURSE ASSAY

- ✓ Sensitive
- ✓ Specific
- ✓ Data-rich
- ✓ MoA-reflective
- ✓ Customisable
- ✓ Repeatable

