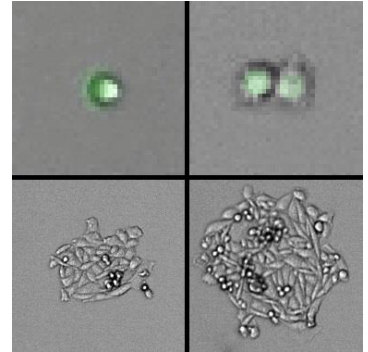


FASCC – Fluorescence Activated Single Cell Cloning

Your Advantage

FDA requires more and more the image based proof of the mono-clonality of your cell line. Methods have been established by using non-toxic fluorescent dyes, e.g. CellTracker® or Calcein-AM, to identify your potential clone from day one of seeding, to expedite the throughput by omitting subsequent colony monitoring. It has been shown that a resolution of 2 µm or worse (i.e. 4x magnification) might not separate two adjacent cells (doublets). Therefore a higher resolution is required, which takes a much longer scanning time for your sample carrier.

With SYNENTEC's NanoView in FASCC we combine high resolution imaging with fast pre-scanning to resolve your potential clones for an unambiguous documentation of your mono-clonality without compromising throughput.



Short Note
SN-B123-XVII-04

Read-Out Data Pre-Scan

Total Number of Cells

Total Number of cells found in a well (which is set as a filter selection for NanoView)

Total Number of Cells in Fluo Cluster

Number of cells resolved in a cluster using fluorescence signal

Read-Out Data NanoView-Scan

Total Number of Cells

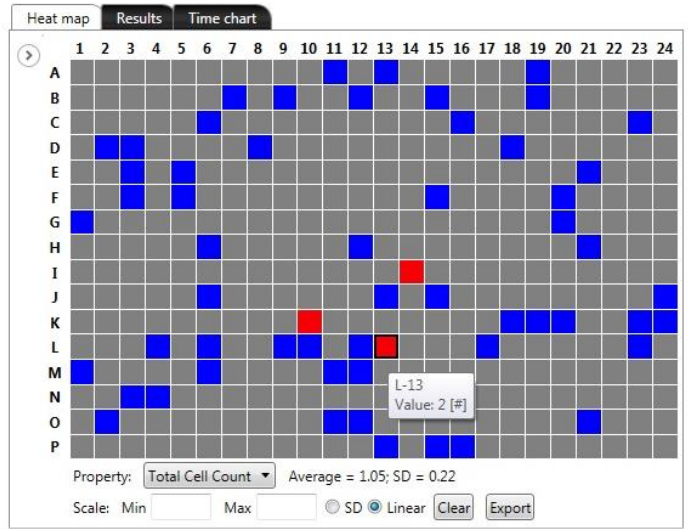
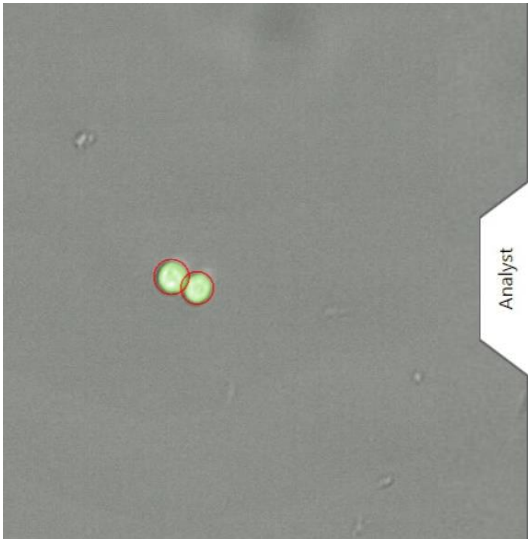
Total Number of cells found in a well for a potential single clone

Total Number of Cells Cluster Fluo

Number of cells resolved in a cluster using fluorescence signal

Total Number of Cells in Cluster BF

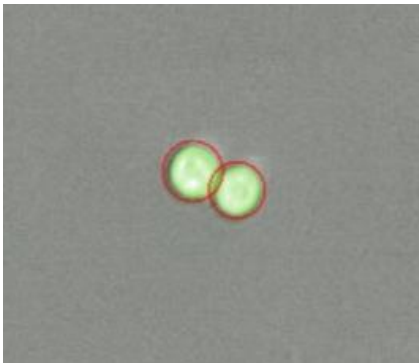
Number of cells resolved in a cluster using brightfield signal



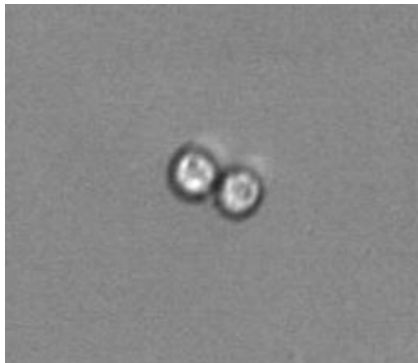
NanoView total cell count result overview

Examples of Doublet Identification and Monoclonality

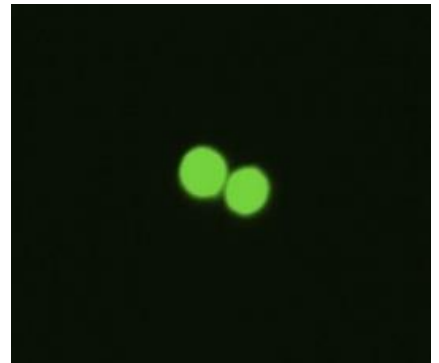
This example shows two cases where the NanoView mode resolved the doublets by using fluorescence and brightfield images.



Overlay image with the brightfield and fluorescence channel and detection



brightfield channel



fluorescence channel

