Image features

| LL | FSC | SSC | CH1 | CH2 | CH3 |

- Six image enabled blue laser detectors
- Every image feature generated from each detector

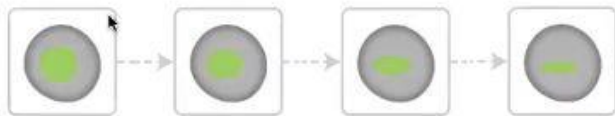- Size (LL,FSC, SSC, CH1, CH2, CH3)
- Eccentricity (LL,FSC, SSC, CH1, CH2, CH3)
- Radial moment (LL,FSC, SSC, CH1, CH2, CH3)
- Max intensity (LL,FSC, SSC, CH1, CH2, CH3)
- Correlation (CH1, CH2, CH3)
- Delta center of mass (LL,FSC, SSC, CH1, CH2, CH3)
- Diffusivity (LL,FSC, SSC, CH1, CH2, CH3)

Feature & Application

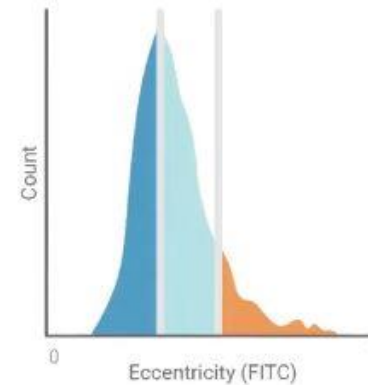## Example images and histogram

Eccentricity
(Scatter and fluorescence)

- Cellular morphology
- Cluster identification
- Doublet discrimination

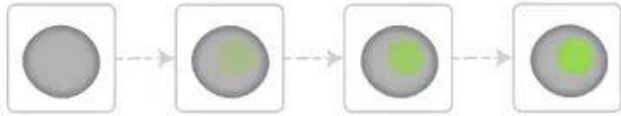Low Eccentricity

Intermediate Eccentricity

High Eccentricity

Count

Eccentricity (FITC)

0   1

Image features

Feature & Application

Example images and histogram

Max Intensity
(Scatter and fluorescence)

- Punctate fluorescence
- Phagocytosis assay
- Cell cycle

Dim Fluorescent Cells
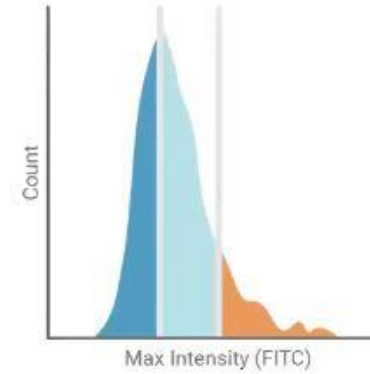
Intermediate Fluorescent Cells
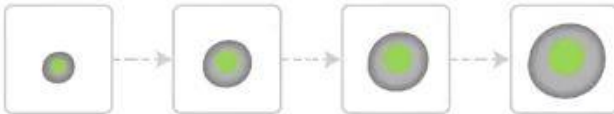
Count

Max Intensity (FITC)
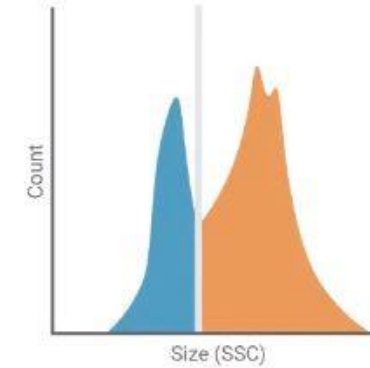
Bright Fluorescent Cells

Size
(Scatter and fluorescence)

- Cellular morphology
- Label-free sorting
- Cell cycle

Small Cells

Count

Size (SSC)

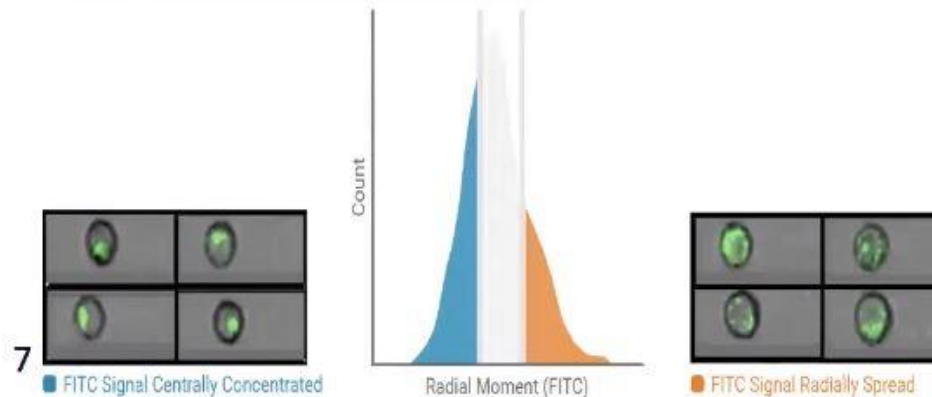Large Cells

Image features

Feature & Application

Example images and histogram

Radial Moment
(Scatter and fluorescence)

- Cellular morphology
- Cluster identification
- Doublet discrimination

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FITC Signal Centrally Concentrated

Radial Moment (FITC)

FITC Signal Radially Spread

Correlation
(Fluorescence: Any two channels)

- Nuclear translocation

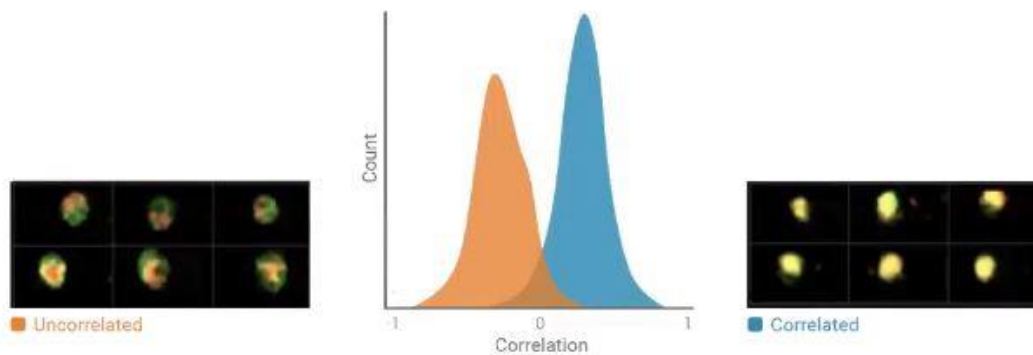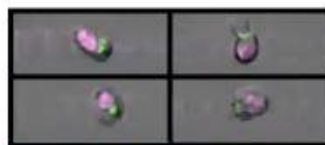Uncorrelated

Correlation

Correlated

Image features

Feature & Application

Example images and histogram

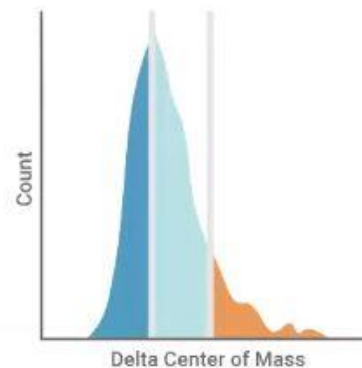## Delta Center of Mass
(Fluorescence: Any two channels)

- Intracellular trafficking
- Cell-cell interaction

Low Delta Center of Mass
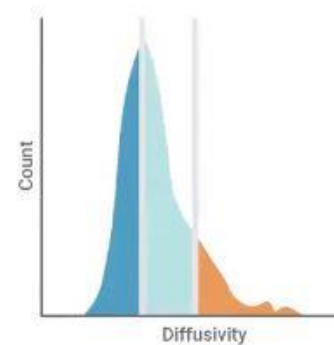
Delta Center of Mass

Int Delta Center of Mass

High Delta Center of Mass

Diffusivity
(Scatter and fluorescence)

- Cell morphology
- Phagocytosis

Low Diffusivity

Diffusivity

Intermediate Diffusivity

High Diffusivity