Kaluza Analysis Software

SOPHISTICATED FLOW CYTOMETRY, SIMPLIFIED.

VISUALIZE
*the possibilities.*

BECKMAN COULTER
Life Sciences

SOPHISTICATED FLOW CYTOMETRY, SIMPLIFIED

Kaluza Flow Cytometry Analysis Software is revolutionary in many ways, but principally in that it allows access to data analysis of large files resulting from complex color analysis.

We discovered a reference to some of the complex mathematical theory that was used to augment Einstein's theory of relativity. This math was developed by a young and brilliant German physicist named Theodor Kaluza who developed theories around the wrapping of space and time. Understanding and unraveling the complexities of multidimensional space are analogous to those of analyzing multi color fluorescent analysis in flow cytometry.

- Loads any listmode file that is compliant with the FCS standard up through version 3.1.
- Processes multi-color files of up to 20 million events in real time
- Designed around a concept of innovation with workflow and ease of use as top priorities

Analyze Any Flow Cytometry Standard (FCS) Compliant File
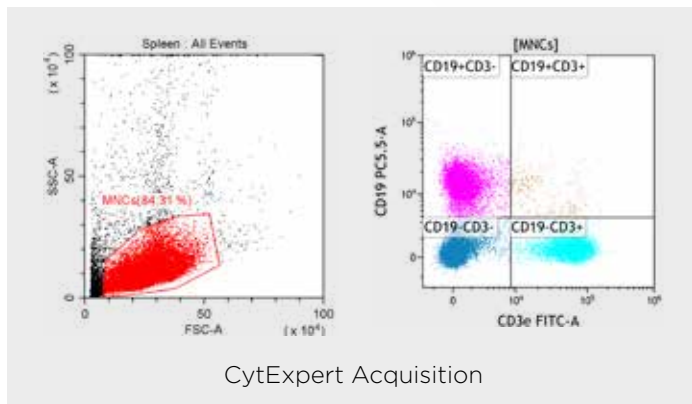
CytExpert Acquisition
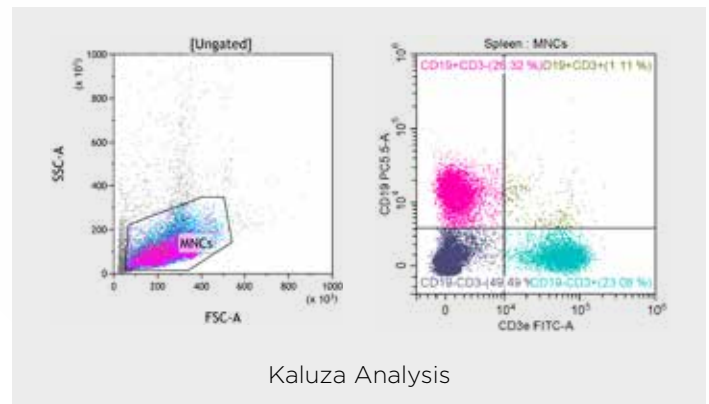
Kaluza Analysis

Kaluza uses the FCS $CYT keyword to identify the flow cytometer used in acquisition. Data scaling preferences for the instrument are set up once upon loading the file into Kaluza. Example shows CytoFLEX* data using CytExpert acquisition software and after importing into Kaluza Analysis. Scatter and fluorescence parameters scaling are identical.

Minimum Computer Requirements

	KALUZA ANALYSIS SOFTWARE	NETWORK LICENSE CONTROL CENTER (NLCC)
Required processor	The processor must support the SSE2 Instruction set.	Quad-Core CPU, 3.2 GHz, above.
Required operating system	Windows 7, Enterprise Edition with Service Pack 1 (32 bit or 64 bit) Windows 8.1, Enterprise Edition (32 bit or 64 bit) Windows 10, Enterprise Edition (32 bit or 64 bit)	Windows 7, Enterprise Edition with Service Pack 1 (32 bit or 64 bit) Windows 8.1, Enterprise Edition (32 bit or 64 bit) Windows 10, Enterprise Edition (32 bit or 64 bit)
Required memory	200 MB of disk space to install For 32-bit systems, up to 4 GB of RAM For 64-bit systems, more than 4 GB of RAM	Memory minimum is 4 GB; 8 GB or above is recommended.
Required hard disk space	At least 1 G free space for storing data files.	The following requirements apply to Windows System Drive (c: drive, by default). • The NTFS format is required for good performance and security. • A minimum of 50 GB of available hard disk space of the Windows System Drive.
Required display	1440 x 900 (Min), Optimized for high-resolution wide screen monitors	No monitor required for the server; standard display for the client.

*CytoFLEX is for Research Use Only. Not for use in diagnostic procedures.
Presented plots and values are for illustrative purposes only and are based on customer reported data. Some information has been modified to simplify the presentation. Individual results may vary.

Visualize The Possibilities

KALUZA ANALYSIS SOFTWARE

Licensing Options

Install the software on as many computers as needed and control access with the license option that fits your needs. A variety of single user and multiuser licenses are available. Multiuser license are installed on networked computers and access can be controlled and monitored using the free Network License Control Center software.

For those that want to try before committing, a free 30 day trial license is available on the Beckman Coulter website. And for short term needs or those that want a longer trial time an economical 1 user 1 year license is now available!

	NON-ACADEMIC PART NUMBER	ACADEMIC PART NUMBER
Kaluza Analysis Software 1 Year, 1-User (Single)	A84174	B16407
Kaluza Analysis Software Perpetual, 1-User (Single)	A82959	B16406
Kaluza Analysis Software, 5-User (Network)	A84175	B16408
Kaluza Analysis Software, 10-User (Network)	A82961	B16409

Network License Control Center

The Network License Control Center (NLCC) is available with any large, multiuser Kaluza license. Whether you're managing 10 users or a 1000 users, the NLCC gives you the functionality to grant/deny access and monitor usage. With the NLCC you can:

• Create detailed usage reports

• Manage License Keys

• Query logs for specific users

Flow Lab

Kaluza NLCC

Kaluza + NLCC account

Kaluza + NLCC account

Kaluza + NLCC account

Kaluza + NLCC account

Core lab Administrator

THE KALUZA PHILOSOPHY

Four Simple Control Panels

Kaluza Analysis Software is designed to simply, efficiently, and quickly analyze multicolor, data. Four simple control panels is all you need to access every aspect of your information!
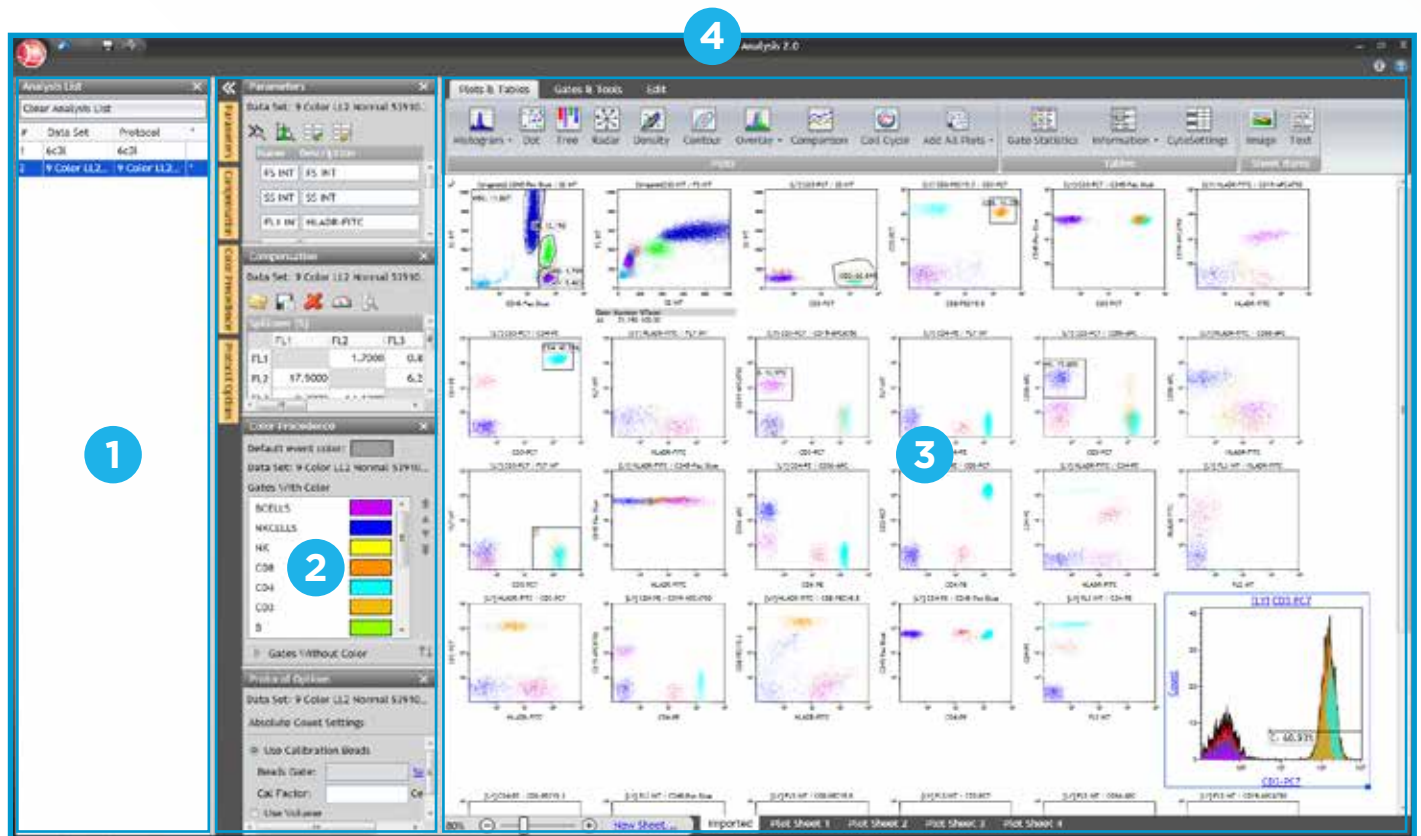
1 Analysis List

Keep track of all of your files, including data files (fcs or lmd), protocols, composite files, or analysis files. Drag and drop to open, reorder, or apply data to protocols. Highlight shows active file and asterisk indicates unsaved work.

2 Attributes Pane

Quickly access to view and edit parameter info, compensation, color precedence, and protocol options. Collapse the panes to maximize analysis space.

3 Workspace

Use the ribbon to create plots and tables, add gates, including auto gate, annotations, and adjust compensation. Add additional sheets or reports as you explore your data. Drag and drop plots and use the zoom tool to manage plots viewed in the workspace.

4 Tool Bar

Use the application button to access batch processing, QC report, plugin management, as well as open, save and export. The quick toolbar includes the unlimited undo and redo controls. And the info and help access detailed information including the complete instructions for use.

Visualize The Possibilities

Just Right Click

At the heart of the Kaluza philosophy is the concept that what you need is just a right click away. Context specific radial menus put the tools you need where and when you need them.
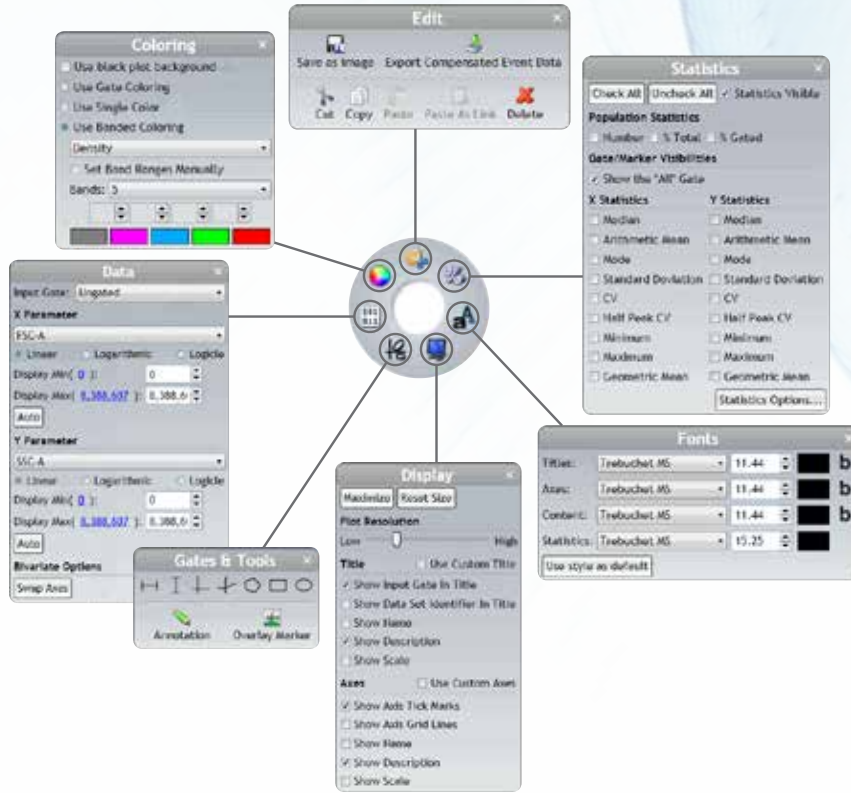
Right Click on the Workspace
Add an item.

Right Click on a Plot
Add a gate.

Right Click on a Gate
Add Boolean logic.

Right Click on a Table
Format text.

DATA MENUS

Information Table Context
Plot Context

STATISTICS MENUS

Information Table Context
Plot Context

ANALYSIS FEATURES

Cell Cycle Analysis

Kaluza Analysis offers two different algorithm models. Changes occur in real time, so you can easily view the differences between the two distributions by clicking back and forth between the two options. Adjust the model by manipulating the constraints either by setting ranges for the peaks or by selecting the peak ratio.
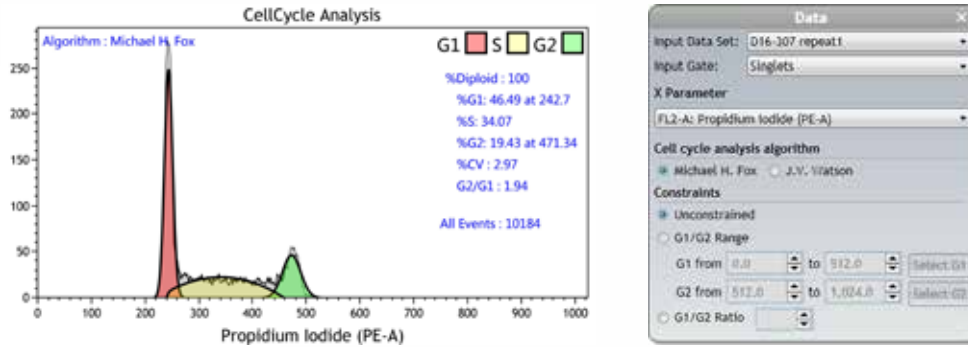
Rare Event Analysis

Sensitive and specific detection of just a few dozens of abnormal target cells among millions of normal cells is one of the most challenging applications in flow cytometry. Kaluza Analysis software has the performance needed to analyze large files and process up to 20 million events in real time. Special features for rare event analysis are included.
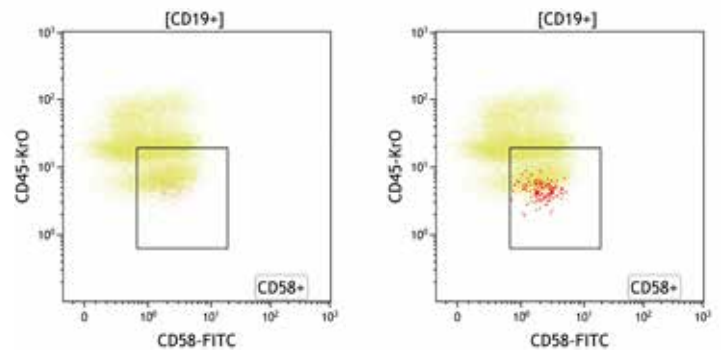

Index Sorting

This assay format allows the multiparametric data from MoFlo Astrios Cell Sorters to be linked to the deposition well, facilitating downstream functional assays at the single cell level.
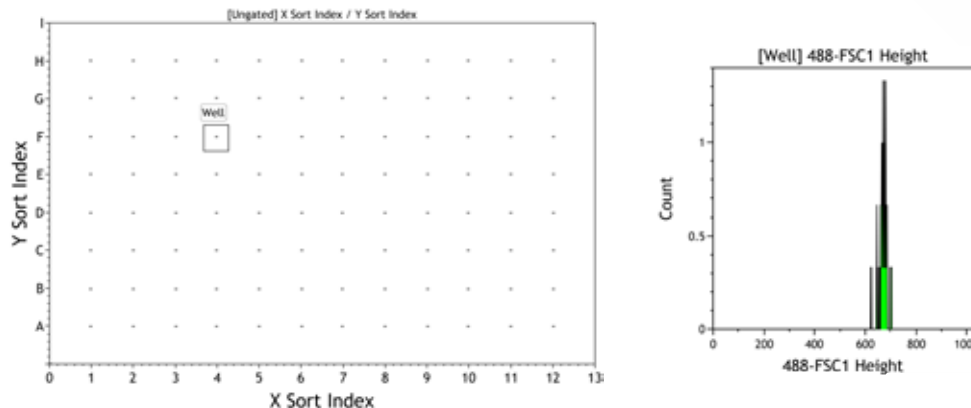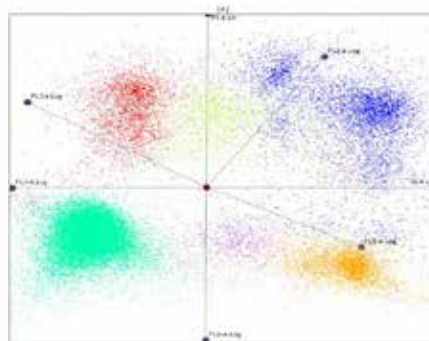
INNOVATIVE PLOTS
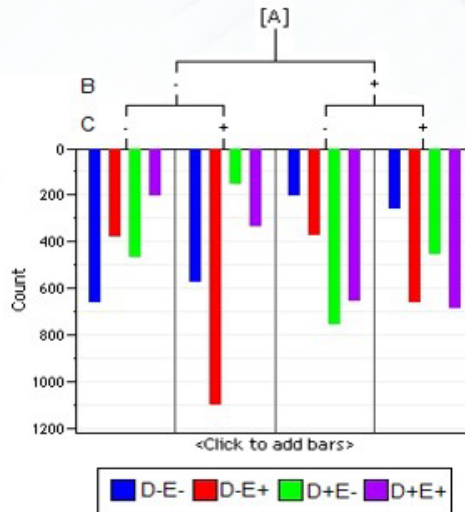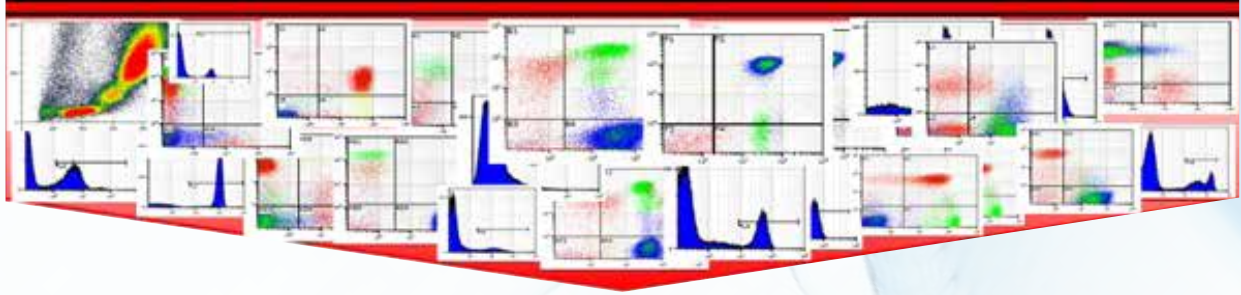
The tree plot can easily represent what typically requires dozens of plots, gates and regions do. Each phenotype can be used as a gate for further data exploration.
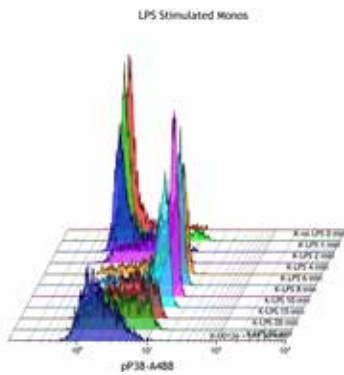
Overlay plots show data from multiple plots on a single pane. Density, dot and histograms can all be utilized in an overlay to easily view trends and changes

The Radar Plat provides a multidimensional view. Clusters appear revealing relationships or rare populations not always apparent using bivariate plots and gating strategies. Animated radar plots can be exported as GIF files.
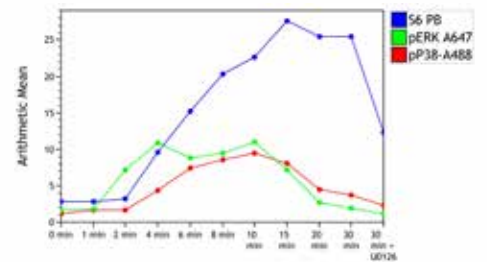
The comparison plot puts data from multiple plots into a single graph. Use it to view trends over time. Compare samples in a study to controls. Normalize samples or not, the choice is yours.

Choose Beckman Coulter for Benchmark Expertise and Innovation

For over 80 years Beckman Coulter has driven innovation. We remain committed to shaping flow cytometry technology to fit seamlessly into your lab's workflow and to provide an optimal user experience. When you choose a Beckman Coulter solution you receive the a high level of expertise, innovation, and quality assurance.

Contact your local Beckman Coulter sales representative.

For Beckman Coulter's worldwide office locations and phone numbers, please visit "Contact Us" at **beckman.com**

FLOW-3094SB10.17