

## Smart

### AO/PI Viability BioApp

Determine the percentage of live and dead cells, and cell concentration in the presence of debris and unwanted nonnucleated cell types - including red blood cells.

### Cytotoxicity BioApp

Determine the CAR T/NK-Mediated Cytotoxicity using tracer and viability dyes.

### Apoptosis BioApp

Investigate cell apoptosis using Hoechst 33342, Annexin V-FITC and propidium iodide (PI).

### Trypan blue BioApp

Obtain cell transfection efficiency and viability estimations by running three fluorescence color assays.

### Transfection BioApp

Obtain cell count, viability and concentration based on trypan blue staining.



#### Product parameters

Diameter range:	3µm to 180µm	
Concentration range:	1×10 <sup>4</sup> to 3×10 <sup>7</sup> /mL	
Objective magnification:	5x	
Imaging element:	1.4 megapixel CCD camera	
USB1 X USB 3.0	1 X USB 2.0	
Storage:	500GB	
RAM:	4GB	
Power supply:	110–230 V/AC, 50/60Hz	
Screen:	10.4 inch touchscreen	
Weight:	13kg (28lb)	
Size (W X D X H): Machine:	254 X 303 X 453mm	Package size: 430×370×610mm
Operating temperature:	+10°C to +40°C	
Working humidity :	20% to 80%	

#### Detector Option

Excitation Light(nm)	Emission filter(nm)	Fluorescent Dyes/Proteins
375nm	460nm	DAPI, Hoechst, BFP
375nm	535nm	Amcyan, Brilliant Violet™ 510
375nm	580nm	Pacific Orange™, Brilliant Violet™ 570
375nm	600LP	Qdot® 605
375nm	665LP	Brilliant Violet™ 650
480nm	580nm	PE
480nm	665LP	PC5, PC5.5, PerCP, PerCP-Cy5.5, PI, 7-AAD
525nm	665LP	7-AAD, Nile-Red, Alex Fluor 647-PE
625nm	665LP	APC, Alex Fluor 647, Alex Fluor 660
Optical flow analysis software:	FCS Express 5 Image	

Please contact your sale representative or technical support for further information about customization of the fluorescent channels

**ALIT Life Science Co., Limited**

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# Countstar® Rigel S3

## The Smart Cell Analyser





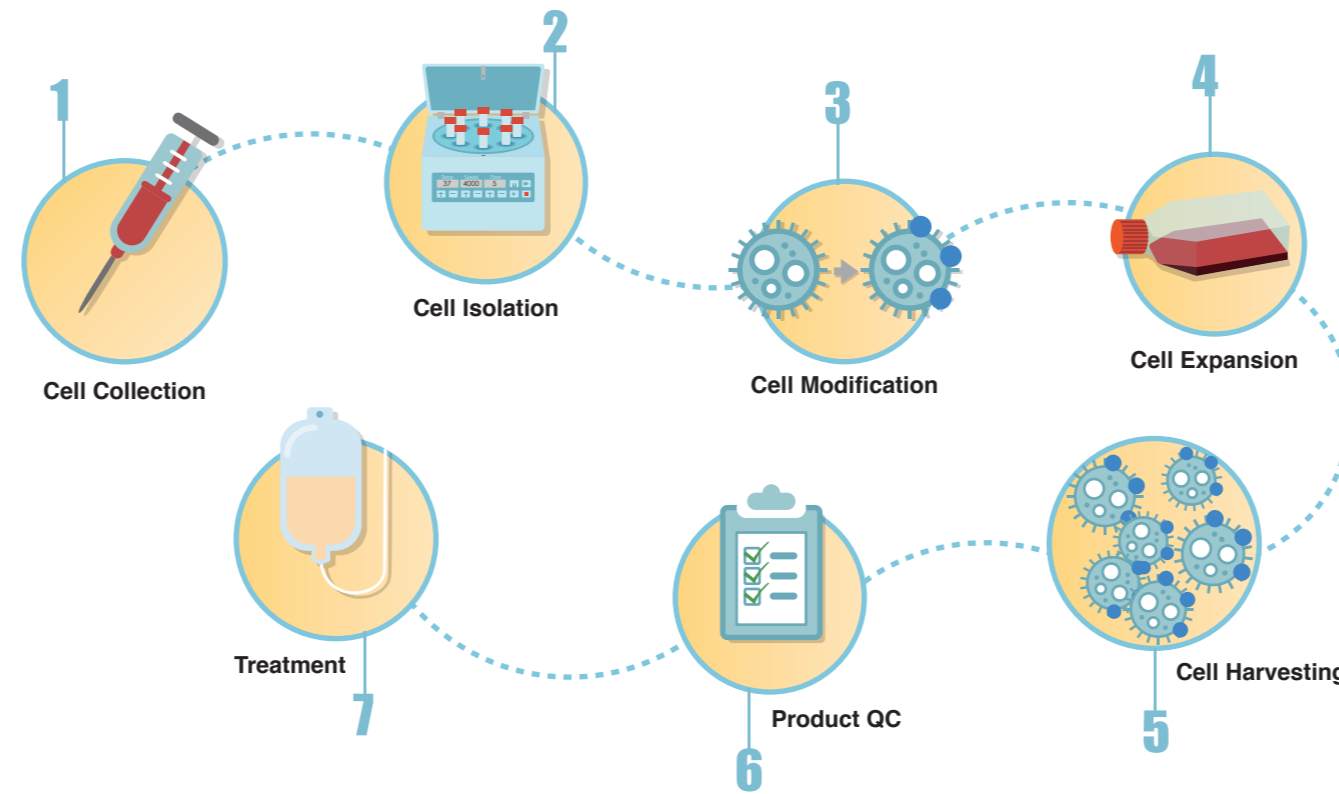
# Monitoring the Quality of CAR-T Production during the whole Process

## Key Benefits

- Automated, consecutive analysis of five samples in a single sequence
- Verify results with the acquired images
- Minimize sample volumes (20µL)
- Comply with cGxP and FDA 21 CFR Part 11
- Customizable BioApps allow multi-channel analyses
- Flexible, user friendly software
- Extremely compact, all-in-one design with a sensitive touchscreen

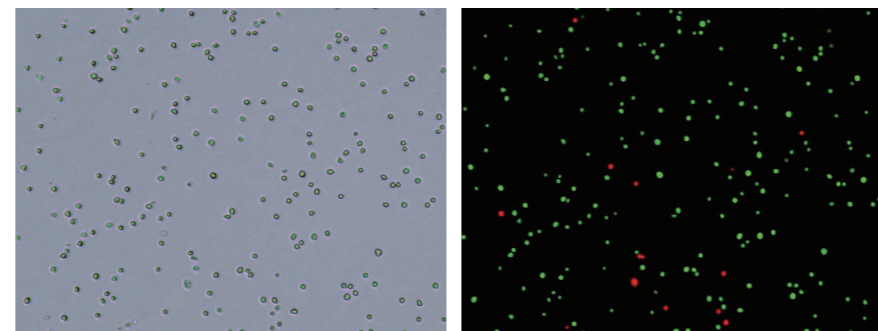
The Countstar® Rigel System combines three fluorescence channels with a bright field digital microscope, image cytometer, and cell counter into a single bench-top instrument. This application-driven, compact, and automated cell imaging system provides an all-in-one solution for cell counting, cell viability and T/NK cell mediated cytotoxicity using Countstar® BioApps. The Countstar® Rigel system provides standardized, GMP - compliant solution for the cell quality control.

For use in cGxP, process development, and research. Not approved as medical device to date.



### Dual-fluorescence viability assay:

Acridine orange (AO) and propidium iodide (PI) are nuclear staining dyes that bind to nucleic acids. The analysis excludes cell fragments, debris and artifact particles as well as undersized events such as platelets, and provides highly accurate results.



### T/NK Cell Mediated Cytotoxicity Assay:

Cytotoxicity studies are performed by labeling the target tumor cells with CFSE or transfecting them with GFP. Hoechst 33342 may be used to stain all cells (both T cells and tumor cells). Alternatively, target tumor cells can be stained with CFSE. Propidium iodide (PI) is used to stain dead cells (both T cells and tumor cells). Discrimination between different cells can be obtained using this staining strategy.

