



Automate your single cell workflows

with Chromium Connect

Generate consistent results
Maximize lab productivity
Integrate validated workflows



10x your productivity

Automated multiomic profiling at single cell resolution

Chromium Connect automates your single cell sequencing workflows, including profiling of gene expression and cell surface proteins, letting you go from cells to sequencing-ready libraries with walk-away convenience. This instrument enables you to generate consistent and reproducible single cell results across experiments and across users. Chromium Connect can reduce errors introduced by manual pipetting and shorten your hands-on time from more than 8 hours to less than 1 hour. Maximize your day and run your single cell experiments with confidence using an integrated and validated solution.

Benefits with automation

Hands-on time	▼	80%
Pipetting steps	▼	90%
Interaction points	▼	70%
Walk-away time	▲	80%

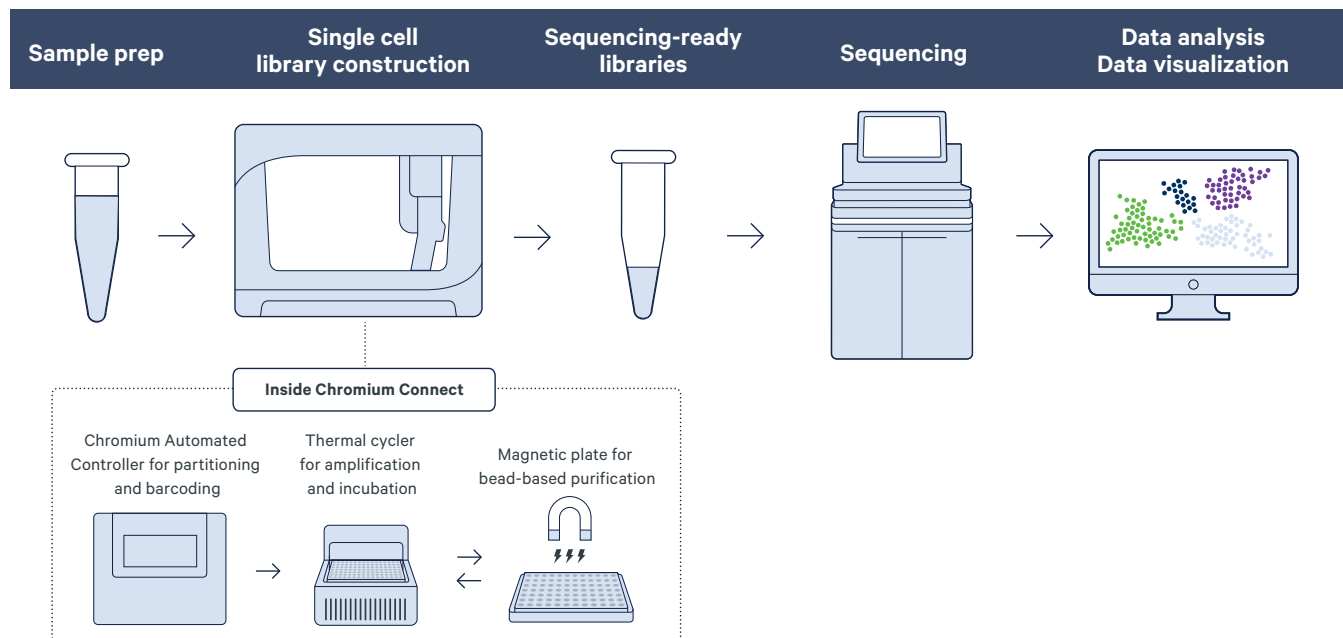
Automation-specific single cell reagents and consumables

Leverage automation-specific reagents for Single Cell Gene Expression and Single Cell Immune Profiling workflows. Reagents for Chromium Connect come in strip tube format for easy loading into specially designed carriers. Each strip tube is color-coded and barcoded to ensure optimal placement on the deck. Flexibility for 1–8 samples means you can get final libraries every day, without wasting reagents or waiting on additional samples. The single-use chip and gasket are also specially designed for use with the Chromium Automated Controller inside Chromium Connect.



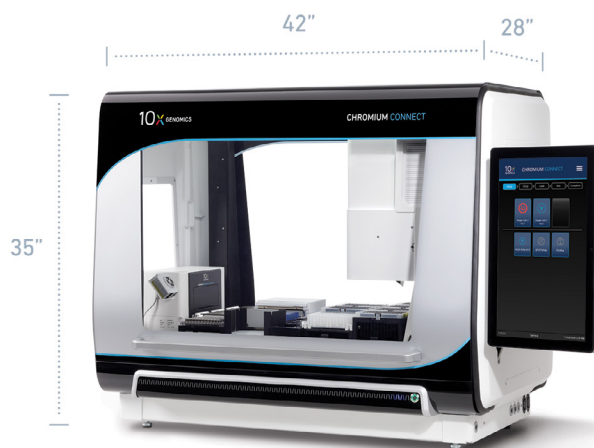
Enabling seamless lab operations

Chromium Connect works as part of an end-to-end single cell sequencing solution—from sample preparation support to turnkey data analysis and visualization tools.



Single cell partitioning, barcoding, and library prep— together in one optimized instrument

Chromium Connect integrates components customized for the 10x Genomics single cell workflow, automation-specific reagents and consumables, and an easy-to-use touchscreen computer. From intuitive self-guided setup to error-proof reagent loading, Chromium Connect is designed so even new users can start running single cell sequencing experiments quickly.



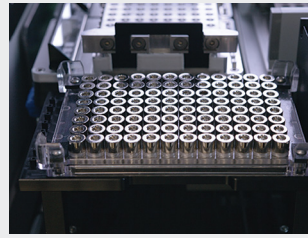
1 Chromium Automated Controller

- Compact and designed for seamless hands-off automation
- Performs single cell partitioning and barcoding



2 Magnetic plate

- Integrated magnetic separator to handle all cleanup steps
- Uses magnetic beads for DNA purification and fragment size selection



3 Optimized reagent carriers

- Custom designed carrier for error-proof reagent loading
- Fits pre-aliquoted reagent strip tubes for up to 8 samples



4 Thermal Cycler

- An on-deck thermal cycler performs all thermal cycling steps for the entire library preparation workflow



5 Gantry

- Movable liquid-handling pipetting device with precision positioning
- Automates hundreds of pipetting steps for the entire single cell workflow



6 Barcode scanner

- 2D barcode reader to scan all reagents and consumables
- Enables experiment tracking and prevents reagent mix-ups

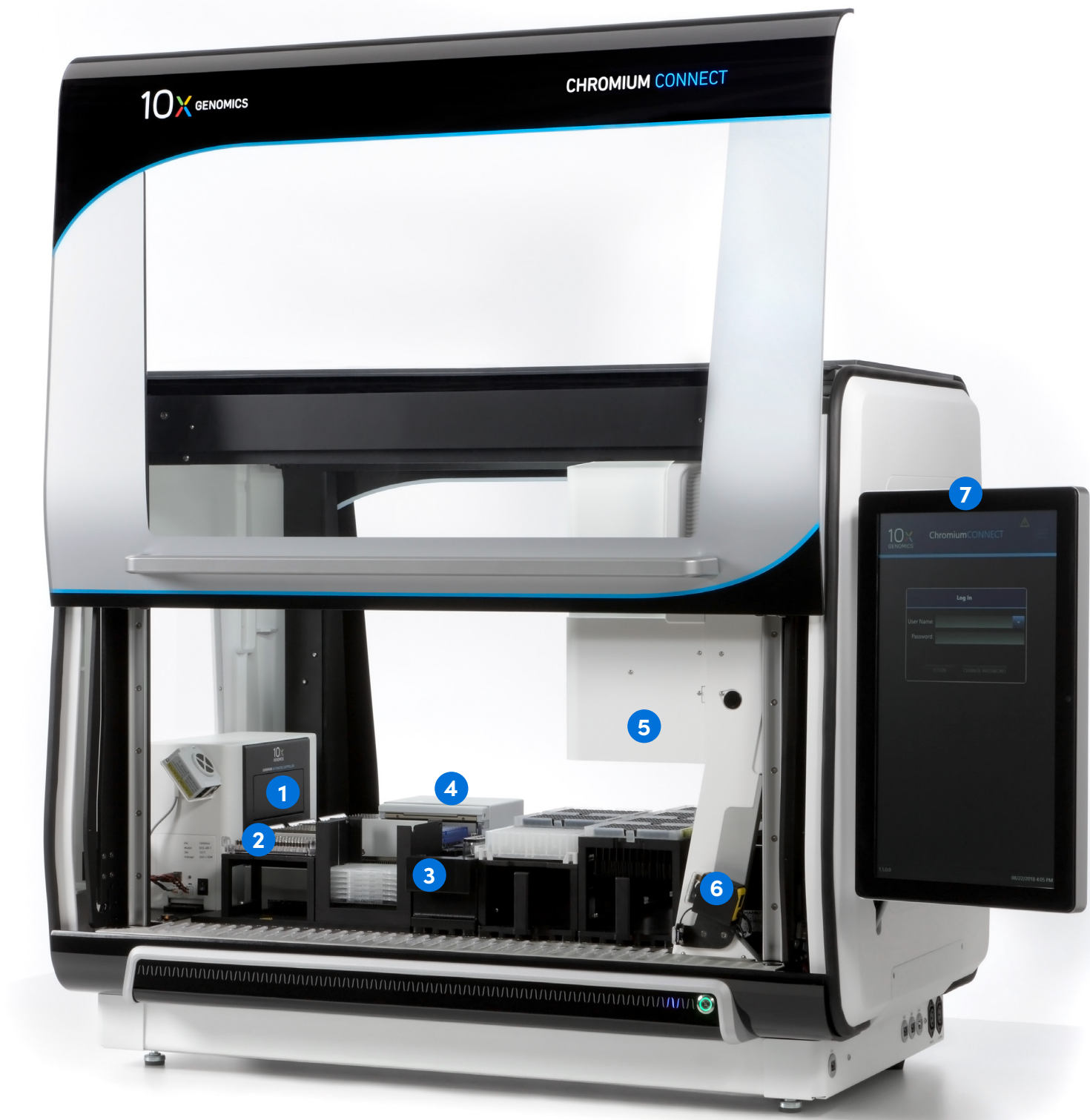


7 Touchscreen computer & software

- Built-in touchscreen interface with internet connectivity
- Guides user step by step through quick and simple experiment setup
- LIMS compatible for sample, reagent, and experiment tracking
- Embedded error-handling features for intuitive troubleshooting



Run your single cell experiments with ease



One automated system, many single cell assays

Available workflows for Chromium Connect

Efficiently profile tens of thousands of cells to reveal cellular heterogeneity across different workflows. Select continuous or flexible, modular workflows for a range of single cell sequencing assays to fit your day-to-day operations.

Single Cell Gene Expression

Automate your 3' single cell gene expression workflows to explore cellular heterogeneity, discover novel targets and biomarkers, and unravel complex cellular processes with increased productivity.

Single Cell Immune Profiling

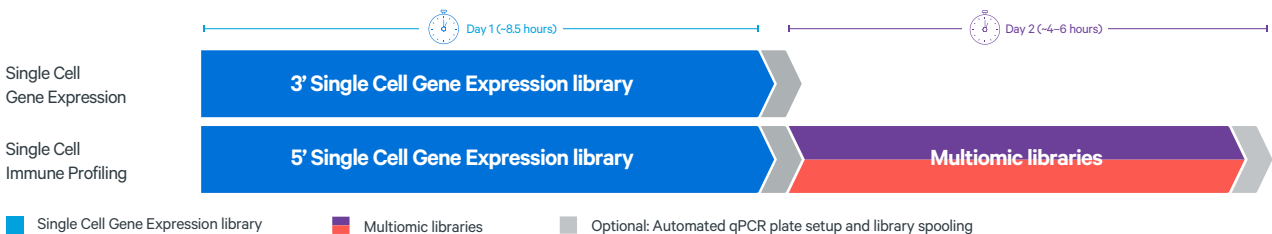
Automate your 5' gene expression and V(D)J amplification workflows, with options to simultaneously measure cell surface protein expression and antigen specificity using Feature Barcode technology, to examine cellular heterogeneity of the immune system and T- and B-cell receptor diversity at scale.

Benefits with automation

	Single Cell Gene Expression	Single Cell Immune Profiling
Hands-on time	▼ 85%	▼ 80%
Pipetting steps	▼ 90%	▼ 95%
Interaction points	▼ 85%	▼ 75%

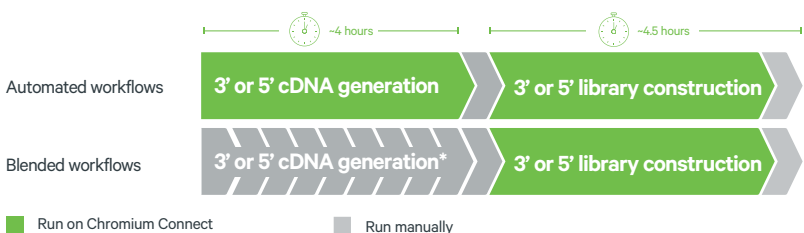
Advantages of Chromium Connect automated workflows, in comparison to manual methods.

Walk-away convenience with Chromium Connect



Go from single cell suspensions to sequencing-ready single cell gene expression libraries in one day, with the option to add on one or more multiomic libraries the next day. Multiomic options include TCR/BCR libraries using the V(D)J workflows, or cell surface protein detection and antigen specificity using 5' Feature Barcode technology.

Flexible workflow options for single cell gene expression



Flexible, modular workflow options for single cell gene expression offer safe and convenient stopping points after cDNA generation to enable storage of purified cDNA samples and batching for library construction. cDNA manually generated on Chromium X/iX or Controller can also be used as input to start the library construction workflow on Chromium Connect.

*Run on Chromium X/iX or Controller using low-throughput or standard assays for single cell gene expression.

Preventative maintenance for Chromium Connect under active Assurance Plan

With an active Assurance Plan, trained field service engineers will conduct preventative maintenance inspections approximately every 6 months. Additionally, 10x Genomics will verify instrument operation and provide documentation about the verification procedures that were conducted.

- Help from 10x Genomics Technical Support upon notification of instrument malfunction
- Instrument repair, including parts, labor, and shipping
- Instrument replacement due to unrecoverable failure
- Replacement of reagents lost during malfunction

Resources

Interactive Product Demo

bit.ly/10x-genomics-connect-demo

Product Literature

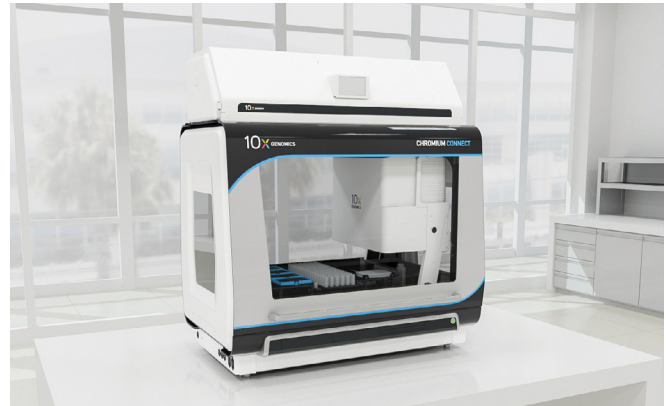
bit.ly/10xgenomics-connect-resources

Assurance Plan Brochure

bit.ly/10x-genomics-connect-assurance-plan

HEPA CAP filtration option

For labs that need to process samples in a clean, positive pressure environment, the HEPA Clean Air Protection (CAP) filtration system is available for Chromium Connect. The integrated hood system saves space and monitors airflow, temperature, and humidity.



Product description	Product code
Chromium Connect Instrument with 12-month warranty	1000171
Chromium Connect Instrument with 24-month warranty	1000180
Chromium Connect HEPA CAP (Optional)	1000174
Chromium Connect Assurance Plan Additional 12 months full coverage	1000173
Chromium Connect Reinstallation	1000172
Chromium Connect Repair and Extended Coverage Repair of part plus 12 months full coverage	1000219
Chromium Connect Move Assistance for moving instrument from dock to lab location	1000221

Product specifications

Parameter	Specifications		
Weight	350 lb (158.8 kg)		
Instrument Dimensions with:	W	D	H
Front Panel closed	42.2"[107.2 cm] × 27.9"[70.9 cm] × 35.22"[89.5 cm]		
and Optional HEPA Hood	42.2"[107.2 cm] × 27.9"[70.9 cm] × 45.3"[115.1 cm]		
Front Panel open	42.2"[107.2 cm] × 27.9"[70.9 cm] × 49.8"[126.5 cm]		
Instrument Dimensions with Ergo Arm:	W	D	H
Fully extended to the right	71.0"[180.3 cm] × 27.9"[70.9 cm] × 35.22"[89.5 cm]		
Fully extended to the front	51.2"[130.1 cm] × 48.5"[123.2 cm] × 35.22"[89.5 cm]		
Electrical Requirements			
System power supply	1400 VA, 50/60 Hz, 100–240 VAC		
Thermal Cycler power supply	1250 VA, 50/60 Hz, 100–240 VAC		
Optional HEPA Hood	250 VA, 50/60 Hz, 100–240 VAC		
Operating Temperature	19–25°C (66–77°F) Use in a typical indoor laboratory environment. Extreme temperature conditions will affect the sensitive reagents used with the instrument.		
Humidity	30–80% R.H. non-condensing		
Altitude	Altitude up to 2000 m (1.2 mile) above sea level		
Power Cable Length			
The power cables will be in accordance with regional specifications.	9 ft Standard		

Chromium Connect service and support

Our automation experts are dedicated to helping you get the most out of your 10x Genomics instrument by offering on-site installation, preventive maintenance, and remote support.

Installation

With this service, our experts will install and verify the instrument for proper performance.

Maintenance

Trained field service engineers will conduct regular preventative maintenance tests.

Support

Technical support staff are ready to troubleshoot and respond to any instrument issues.

Contact us

10xgenomics.com | info@10xgenomics.com

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LIT000064 – Rev E – Chromium Connect Product Brochure

