Characterize With Confidence

Multiple Characterizations and Applications on ONE Platform

CE-SDS • cIEF • CZE • Glycans • Cell and Gene Therapy
Consistent, Compliant Analysis Faster than Ever.

Confidently safeguard the success of your biologics with the SCIEX PA 800 Plus system that fully enables regulatory compliance.

**Repeatability Matters**

Even small variations in temperature can affect migration time. PA 800 Plus delivers repeatable results with exclusive recirculating liquid coolant to precisely control separation temperature.

**Portability Matters**

Develop and lock-down methods applicable to QC or regulated environments. PA 800 Plus easily transfers methods using robust, automated assays with proven portability – perfect for global multi-user, multi-instrument organizations.
Results You Can Trust
With SCIEX, you can characterize any molecule with industry and regulatory accepted CE technology. That’s one of the many reasons why virtually all manufacturers of commercial therapeutic monoclonal antibodies use SCIEX CE.

I can do ALL this on my PA 800 Plus

- **Monoclonal Antibody Applications**
  - Purity/Heterogeneity with Gold Standard CE-SDS in minutes
  - Glycan Analysis with award-winning Fast Glycan Technology
  - Charge Heterogeneity with fast and simple CZE or with hi-res cIEF

- **Cell and Gene Therapy Applications**
  - Capsid Proteins Purity
  - Nucleic Acid and Plasmid Analysis

... with Expert Worldwide Support
Rely on SCIEX to provide world-class global support, delivered consistently across all geographies. Let SCIEX help you develop your next breakthrough therapeutic.

All possible on a single platform biopharma labs depend on.
I can do more...

**Accurate • Reliable • Consistent**

### Purity/Heterogeneity with Gold Standard CE-SDS

*Reduced <15 min. / Non-reduced <18 min.*

- Fastest CE-SDS separation time (12-18 minutes)
- Quantitation of impurities down to 0.01%
- Reproducible to 3 or more orders of magnitude sample concentration

### Glycan Analysis with Award-Winning Fast Glycan Technology

*Glycoprotein to glycan ID in 65 min.*

- Up to 2x faster than HILIC
- 1-hour sample prep
- Automated Glycan ID
- Cost and resource effective

### Protein Charge Heterogeneity with Ultra Hi-res cIEF

*pl range and accuracy in 1 run*

- High pl accuracy on extreme acidic and basic variants
- High resolution throughout the pl range
with incredible flexibility.

**Robust • Fast • Quantitative • Automated • Stress-Free**

### Charge Variant Analysis by CZE

*Quick and simple*

- Screen charge variants in 10 minutes
- Save time with fast, straightforward sample preparation
- Same method applies to a wide range of $p$I

### Pharmacopoeial Protein Characterization

*Beyond monoclonal antibody characterization*

- Increased confidence in regulatory submissions using Pharmacopoeia methods
- Automated, quantitative, and sensitive profiling of Erythropoietins (EPO), Somatropin (Human Growth Hormone), Aprotinin using Pharmacopoeia methods

### Cell and Gene Therapy

*Robust, flexible solutions*

- Assess size, purity, and capsid protein ratios
- Multiple kit-based chemistries available to assess the quality and impurities of nucleic acids through the use of ultrasensitive fluorescence detection
Flexible Workflows to Help You do More
When you can do it all on a single instrument you know well, you can accomplish a lot before noon.

Software As Easy As 1, 2, 3...
SCIEX software reduces operational complexity so you achieve more faster, for exceptional productivity.

One Cartridge, Multiple Applications
The agile EZ-CE cartridge functions across multiple applications streamlining your workflow and simplifying your inventory process.

I can get the job done...
Quick • Easy • Cost-effective
and trust my results.

Industry and Regulatory Proven CE Technology
Extensive intercompany studies have assessed the practical application of CE-SDS, cIEF, CZE and glycan analysis performed across the biopharmaceutical industry, demonstrating the methods are validation-ready.

The Best Technology Application
“This year’s winner is SCIEX’s high-throughput glycosylation analysis... it is a fully automated sample preparation for ultrafast N-glycosylation analysis of antibody therapeutics.” – BioProcess International

USP Referenced
USP 39 NF 34 Chapter <129> recognizes SCIEX CE-SDS as “a sensitive, analytical method for quantitative estimation of product-related impurities such as nonglycosylated molecules, half antibodies, and fragments...”

Held to the Highest Quality Standards
SCIEX Capillary Electrophoresis systems have earned a global reputation for consistently meeting or exceeding our customers’ quality expectations. Our commitment to excellence and continuous improvement is reflected in our comprehensive Quality Management System which complies with the requirements of ISO 9001:2008.

Multi-Site N-glycan mapping study 1: Capillary electrophoresis–laser induced fluorescence.
http://www.tandfonline.com/doi/abs/10.1080/19420962.2015.107687

Evaluation of capillary zone electrophoresis for charge heterogeneity testing of monoclonal antibodies.

A series of collaborations between various pharmaceutical companies and regulatory authorities concerning the analysis of biomolecules using capillary electrophoresis.

Intercompany study to evaluate the robustness of capillary isoelectric focusing technology for the analysis of monoclonal antibodies.
Supplies and Resources
Items can be ordered at sciex.com/contact-us/ce-ordering

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<th>Reagents</th>
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<tr>
<td><strong>Purity</strong></td>
<td>Universal Vials A62251</td>
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<tr>
<td>IgG Purity and Heterogeneity Assay A10663</td>
<td>200 µL Microvials (pkg of 100) 144709</td>
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<tr>
<td>SDS-Gel Multipack (4 bottles) A30341</td>
<td>Universal Vial Caps A62250</td>
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<tr>
<td>10 kD Protein Standard A26487</td>
<td>Electrode Replacement Kit A47775</td>
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<td>IgG Control Standard (3-pack) 391734</td>
<td>Vial Cap Opener A95348</td>
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<tr>
<td><strong>Purity/Sizing</strong></td>
<td>Buffer Vial Tray (36 vials) A58254</td>
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<tr>
<td>SDS-MW Assay Kit/ Purity/Sizing 390953</td>
<td>Buffer Vial Tray (48 vials) A58255</td>
</tr>
<tr>
<td>MW Sizing Standard A22196</td>
<td>nanoVials (pkg of 100) 5043467</td>
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<td><strong>Glycan</strong></td>
<td>Cartridge Assembly, 30 cm Capillary A11147</td>
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<tr>
<td>Fast Glycan Labeling and Analysis Kit B94499PTO</td>
<td>Blank Cartridge Assembly Kit 144738</td>
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<td>Carbohydrate Labeling and Analysis Assay 477600</td>
<td>Cartridge Rebuilding Kit 144645</td>
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<td>N-CHO Capillary 477601</td>
<td>Cartridge Tubing Kit 144689</td>
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<td><strong>Charge Heterogeneity</strong></td>
<td>Capillary Coolant (450 mL) 359976</td>
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<td>Advanced cIEF Starter Kit A80976</td>
<td>EZ-CE Capillary Cartridge (CE-SDS, Fast Glycan, CZE) A55625</td>
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<tr>
<td>cIEF Peptide Marker Kit (pI Marker Kit) A58481</td>
<td>Bare Fused Silica 50 µM x 67 cm Capillaries 3-pack 338451</td>
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<td>Neutral Capillary 477441</td>
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<td>eCAP ssDNA 100-R Kit 477480</td>
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<tr>
<td>dsDNA 1000 Kit 477410</td>
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Hardware and Consumables are manufactured under ISO 9001:2008

**Need to Connect to a Mass Spec?**

**CESI 8000 Plus**

With CESI-MS you can effectively integrate high-efficiency capillary electrophoresis (CE) with electrospray ionization (ESI) into a single dynamic process – **within the same device.**
Specifications and Ordering Information

Reach out to your local SCIEX representative to order today.

System Specifications
Dimensions:
Height: 29.2 in (74.2 cm)
Door Open: 38.8 in (98.6 cm)
Width: 25 in (63.5 cm)
Depth: 28.4 in (72.1 cm)
Weight (uncrated): 188 lbs (85.3 kg)
(includes photodiode array detector)

Electrical Requirements:
Voltage: 100 - 240 V; 50/60 Hz
Voltage Range:
1 to 30 kV programmable in 0.1 kV increments
Current Range:
3 to 300 μA programmable in 0.1 μA increments
Pressure Delivery Range:
-5 to +100 psi
Sample Temperature Control:
4 - 60°C
Capillary Temperature Control:
15 - 60°C

System Capacity
Sample Trays:
2 x 96-well plates
2 x 48 universal vials
Buffer Tray:
2 x 36 universal vials

Detection Capability
UV/Vis
200, 214, 254, 280 nm standard filter
190 - 600 nm (custom filter option)
Diode Array:
190 - 600 nm (programmable)
0.5 - 32 Hz scan collection frequency (programmable)
Laser Induced Fluorescence (LIF):
300 - 700 nm excitation range
350 - 750 nm emission range
0 - 1000 RFU
Source Lasers with 3 mW
Power Output:
488 nm solid-state laser
(included in A66528)

Ordering Information
A66528
PA 800 Plus
Pharmaceutical Analysis System
Includes separation module with UV, photodiode array and LIF detection; system controller with PA 800 Plus software
A66527
PA 800S Plus
Pharmaceutical Analysis System
Includes separation module with photodiode array detection; system controller with PA 800 Plus software
Network Your Way to Success
Discover How the SCIEX Success Network
Speeds and Simplifies Your Path to Answers

SCIEXNow™ Online
The everything, anytime destination for all your SCIEX support needs

SCIEX University
The most diverse and flexible learning options available

SCIEX Service and Support
We’re here to help you achieve your goals quickly and efficiently

SCIEX Software Support
Get the latest software, so your instruments run at peak performance

SCIEX Community
Find the answers you need from SCIEX experts as well as your peers

Start Your Path to Success Now: sciex.com/support

Answers for Science.
Knowledge for Life.