Agilent Technologies
CE-LIF Solution

Combining the Agilent 7100 Capillary Electrophoresis system with the Picometrics Laser-induced Fluorescence (LIF) detector
Combined CE-LIF Solution

Laser-induced fluorescence detection (LIF) offers one way to achieve very high sensitivity and compound specificity in capillary electrophoresis. A tailored and seamless solution for CE-LIF is possible by combining Agilent 7100 CE instruments with LIF detectors from Picometrics*.

* Picometrics Technologies SAS (Toulouse, France)
Advantage of CE-LIF

Laser-induced fluorescence detection is more powerful at a specific wavelength than any UV lamp. Fluorescence is proportional to light power and the coherent laser light can be collimated totally in a capillary.

Sensitivity and specificity of detection is far superior to other optical methods, especially under conditions as found in capillary electrophoresis (low nL sample volumes and 25-75 µm short light path determined by diameter of the capillary)

Typical applications in pharma, biopharm or clinical research

(Drug discovery, development, QA/QC)

- Protein therapeutic molecules production: antibodies
- Carbohydrates and glycan's: antibodies or vaccines
- Oligonucleotide analysis (aptamers...)
- Neuroamines and catecholamine
- The only direct CE-LIF-MS online solution
Advantage of Agilent-Picometrics CE-LIF

The Agilent 7100 CE is the most flexible CE instrument to host external detectors.

- Easy-to-access cassette type (no liquids or sealants)
- Multiple detectors at a time (e.g., direct LIF-MS)
- Full software control of LIF through RC.net driver
- Signal transfer into Agilent OpenLAB CDS ChemStation

The Zetalif LED detector is a sensitive solution and offers a range of wavelengths: 450, 480, 530 or 640 nm.

- Complete solution with easy setup
- Small footprint of solution + flexible combinations
- Reduced capital cost for LIF detection

► CE-LIF, CE-LIF-MS, HPLC-LIF, ...
► detection inside or outside of CE, A/D converter included
► long-life LED based LIF, flexible use of modular devices
Application: CE-LIF Impurity Analysis

Separation of non-reduced mAb spiked with cholera toxin B (CTB)

Quantification of cholera toxin B (CTB)
Information on 7100 CE and LIF

Visit Agilent web site at:

http://www.agilent.com/chem/ce
http://www.agilent.com/chem/chem/cems

Further Agilent product information:

• 5991-1511EN Brochure
• 5990-3962EN Data Sheet
• 5990-3822EN CE Consumables Catalog
• 5990-3980EN CE Partner CD

Basics of CE methodology and application data:

• 5990-3777EN Primer
• 5990-5244EN Ion Analysis Compendium
• Web site go: Applications

Visit Picometric web site at:

http://www.picometrics.com