

The Introduction of Fast, Sensitive, and Robust Capillary Electrophoresis coupled to Mass Spectrometry (CE-ESI-MS)

Introducing the PrinCE Next 840 with the PrinCE Next EMASS-II Ion Source

The PrinCE Next EMASS-II ion source incorporates an EOF driven sheath liquid flow electrospray emitter technology. In this novel sheath-flow CE-MS interface design; sheath liquid is supplied through a vial comprising an electrode. The vial is in liquid communication with the electrospray emitter interior through a tee. When the electrode is connected to an external high voltage power supply, electroosmotic flow of the sheath liquid is generated from the borosilicate glass emitter surface.



The sheath liquid flows across the outlet of the separation capillary, where it entrains the analyte liquid prior to exiting through the opening at the electrospray emitter tip, producing a nanospray generated by electrokinetic flow of the sheath liquid, thus minimizing dilution of the CE effluent. Compared with a typical sheath-flow CE-MS interface, this innovative design results in significant increase in sensitivity (50-100 fold or higher increase in mass spectrometry signal) and robustness.

Features

- > EOF-driven sheath liquid flow interface
- > Use of extremely short capillary length of 50cm (600V/cm)
- > Nanoflow sensitivity
- > High electrospray efficiency
- > Extremely robust
- > Established CE-MS methods for peptide mapping and reduced monoclonal antibody intact mass analysis

Comprehensive Product Support

- > Supported capillaries wit 200-360 μm OD (bare, neutral and cation)
- > Supported MS (Thermo, Waters and Bruker)
- > Application support
- > Demonstrations in your lab



Leaders in Capillary Electrophoresis Technology

Technical Specifications PrinCE Next 840

- MAb CE-MS platform: intact mass analysis, peptide mapping, reduced mAb intact mass analysis
- mAb PK analysis >
- > Fusion protein PTMs
- > Polysaccharide CE-MS release assay
- N-glycan analysis >
- Compound stability >

Angiotension I & II Mixture



Four Protein Mixture





Reduced Monoclonal Antibody

RT: 0.00 - 38.46 SM: 3B

GCEKSLHTLF GDELCKVASL RETYGDMADC CEKQEPERNE CFLSHKDDSP DLPKLKPDPN120 TLCDEFKADE KKFWGKYLYE IARRHPYFYA PELLYYANKY NGVFQECCQA EDKGACLLPK180 17 IETMREKVLA SSARQRLRCA SIQKFGERAL KAWSVARLSQ KFPKAEFVEV TKLVTDLTKV240 HKECCHGDLL ECADDRADLA KYICDNQDTI SSKLKECCDK PLEKSHCIA EVEKDAIPEN³⁰⁰ LPPLTADFAE DKDVCKNYQE AKDAFLGSFL YEYSRRHPEY AVSVLLRLAK EYEATLEECC360 AKDDPHACYS TVFDKLKHLV DEPQNLIKQN CDQFEKLGEY GFQNALIVRY TRKVPQVSTP420 27 9 14 22 31 19 TLVEVSRSLG KVGTRCCTKP ESERMPCTED YLSLILNRLC VLHEKTPVSE KVTKCCTESL⁴⁸⁰ VNRRPCFSAL TPDETYVPKA FDEKLFTFHA DICTLPDTEK QIKKQTALVE LLKHKPKATE⁵⁴⁰ EQLKTVMENF VAFVDKCCAA DDKEACFAVE GPKLVVSTQT ALA583

Ordering Information

Part No.	Model	Description
0005.166	PrinCE Next EMASS-II Ion Source	PrinCE Next EMASS-II CE-ESI-MS ion source for coupling Capillary Electrophoresis and Electrospray lonisation Mass Spectrometry



© 2015-2016

PO Box 2194, 7801 CD Emmen The Netherlands

Tel: +31 (0)591 629184 +31 (0)591 628385 Fax:

www.princetechnologies.com sales@princetechnologies.com

oem@princetechnologies.com info@princetechnologies.com