





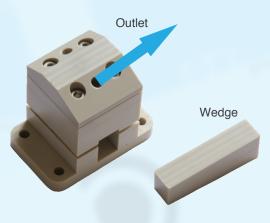
HPLC Cell for Screen-Printed Electrodes

Ref. HPLCELL

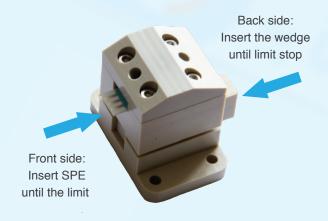
This cell for Screen-Printed Electrodes is specially designed for working in **High-Performance Liquid Chromatography** systems. **HPLCELL** is a thin layer cell that allows an easy replacement of the electrochemical cell using Screen-Printed Electrodes.



FRONT SIDE



BACK SIDE



Tr

The wedge allows to adjust the intermediate piece and the SPE. It fits properly allowing a perfect sealing.

The replacement of the electrode is easily done, after removing the wedge, by pulling down the intermediate piece of the HPLCELL.

Screen-Printed Electrodes can be easily replaced by removing the wedge and pressing downwards the intermediate piece of the HPLCELL. Once the SPE is replaced, the wedge is pushed into the hole until the stop. The o-ring inside the cell allows a perfect sealing during the measurement.



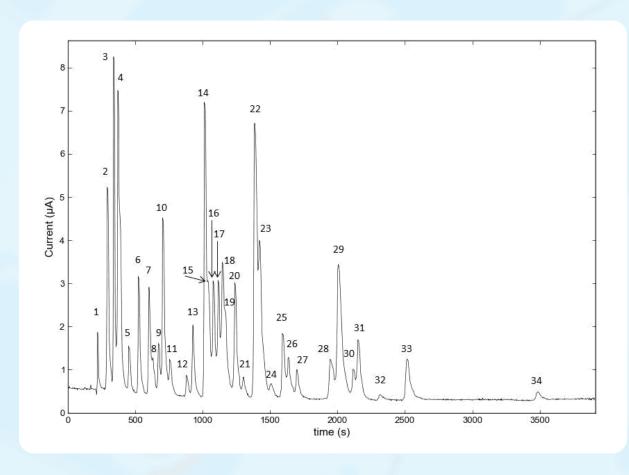






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Polyphenols analysis- A mixture of 34 compounds were analyzed between 100 ng to 5 μg (dissolved in ACN:H₂O 1:4).
For HPLC analysis: Waters (Milford, MA, USA) LC system and 250×4.6 mm i.d., 4 μm reversed-phase Nova-Pak C18 (Waters, Milford, MA, USA) column. Gradient of: solvent A (water, NaCl 0.1M/acetic acid, 98:2, v/v) and solvent B (water/acetonitrile/acetic acid, 73:25:2, v/v/v) at a flow rate of 1.0 mL/min (0–80% B linear from 0 to 55 min, 80–90% B linear, from 55 to 57 min, 90% B isocratic from 57 to 70 min, 90–95% B linear from 70 to 80 min, 95–100% B linear from 80 to 90 min). Volume of sample: 40 μL. The detection conditions were: Amperometric Detection at 1.0 V with Multi-Walled Carbon Nanotubes Screen-Printed Electrodes (Ref. 110CNT).

Compounds: 1) 3,4-OH-maldelic ac; 2) 4-OH-mandelic a; 3) Gallic a; 4) 1,2,3-OH-bencene; 5) 3-OH-mandelic ac; 6) 3-OH-4-MeO-mandelic ac; 7) Protocatechuic ac; 8) Pyrocatechol; 9) 3,4-OH-phenylacetic; 10) 4,5-OH-4-MeO-benzoic ac; 11) 4-OH-benzoic ac; 12) 3-(3,4-OH-phenyl)propionic ac; 13) 4-OH-hippuric ac; 14) Vanillic ac; 15) Caffeic ac; 16) 3-OH-benzoic ac; 17) 4-OH-3-MeO-phenyl acetic ac; 18) Syringic ac; 19 4-methylcatechol; 20) 3-OH-phenyl acetic 21) 3-(4-OH-phenyl)propionic ac; 22) 4-OH-counaric ac; 23) 3-(3-OH-phenyl)propionic ac; 24) Ferulic ac; 25) Benzoic ac; 26) Veratric ac; 27) Phenylacetic ac; 28) Homoveratric ac 29 Isoferulic ac; 30) Homoanisic ac; 31) 4-MeO-benzoic ac; 32) 4-ethylcatechol; 33) 3-(3,4-MeO-phenyl)propionic ac; 34) 3,4,5-MeO-cinnamic ac; acid (ac), hydroxy (OH), methoxy (MeO).

Also, specific connectors that act as an interface between the screen-printed electrode and any potentiostat (ref. CAC) and other accessories are available at *DropSens*.

Related products

















