

- **Highest sensitivity**
- **Adjustable Spacer Technology (AST)**
- **Fast stabilization**
- **Easy to use (tool-free assembly)**

The SenCell™ is a new generation electrochemical flow cell specifically designed for highest sensitivity. The tool-free assembly and the stepless adjustable working volume guarantee ease of use and fast stabilization. The volume of the cell is small and can be adjusted between 0 and 300 nL. The cell is ideally suited to run with applications covering normal-bore HPLC down to capillary UHPLC dimensions.

### Highest sensitivity

To realize the highest detection sensitivity, the cell design is based on the confined wall-jet principle. A three-electrode configuration is used consisting of working electrode (WE), reference electrode (REF) and auxiliary electrode (AUX). The AUX is kept at precisely the same potential as the reference electrode via a voltage clamp, compensating for any polarization effects that might occur at the electrodes. In addition, utmost care has been devoted to the quality and finishing of the electrode material so that the highest sensitivity with fast stabilization is achieved, making the cell ideally



suited for ultra-trace analysis in (U)HPLC, micro- and capillary LC/ECD.

### Adjustable Spacer Technology (AST)

The cell is based on a proprietary Adjustable Spacer Technology (AST) [1], making the use of gaskets (spacers) obsolete. To adjust the cell volume, simply turn the cell with the provided adjustment key from the present position to the desired position to achieve highest detection sensitivity (signal-to-noise ratio). [1] Patent US 9310330 B2

### Adjustment of the spacer (AST)

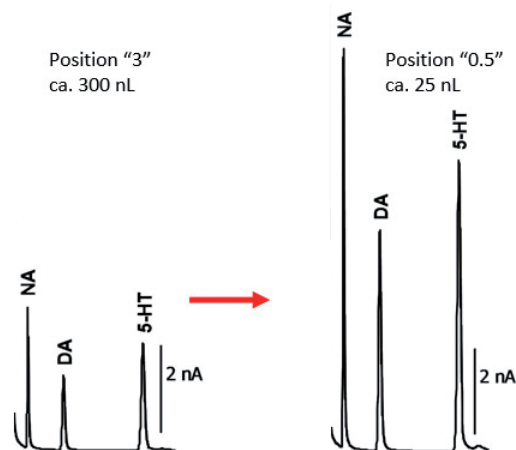
Adjustment of the spacer from position 2 (left side) to 1 (right side). Simply turn the cell bottom counter clockwise with the provided adjustment key.





## Chromatograms

Chromatograms of 100 nM standard of catecholamines with adjustment of the SenCell spacer from position 3 to 0.5, corresponding to approx. 300 and 25 nL working cell volume, respectively.



## Ease of use

The tool free, easy-lock screw assembly allows for fast (dis-)assembly. Furthermore the Adjustable Spacer Technology (AST) guarantees for highest sensitivity (S/N) and fast stabilization.

## Reference electrodes

The SenCell is available with 3 different color-coded reference electrodes that can be easily exchanged to fit any application.

- HyREF (Pd/H<sub>2</sub>) – black
- ISAAC (In Situ Ag/AgCl) – green
- Sb salt bridge (Ag/AgCl) – blue



## Specifications SenCell™

Cell type	Three electrodes, wall-jet flow cell
Cell working volume	0 - 300 nL (adjustable)
Total cell volume	approx. 0.5 mL
Working electrode diameter	2 mm
Working electrode (WE)	Glassy Carbon (GC), Ag, Au and Pt
Reference electrodes	sb (salt bridge Ag/AgCl), ISAAC (In-situ Ag/AgCl), HyREF™ (Pd/H <sub>2</sub> )
Auxiliary electrode	Stainless steel
Wetted materials	PCTFE, glassy carbon, stainless steel, PEEK, silicone, REF material, WE material
Max. pressure (post-column)	5 bar / 73 psi
Fluidic connections	1/16" o.d. PEEK tubing, with 10-32 PTCFE fingertight connections
Electric connections	Cell cable for use with electrochemical detector

Part no	Description	Part no	Description
116.4120	SenCell 2 mm GC sb	116.4322	SenCell 2 mm Pt HyREF
116.4220	SenCell 2 mm GC ISAAC	116.4121	SenCell 2 mm Au sb
116.4320	SenCell 2 mm GC HyREF	116.4221	SenCell 2 mm Au ISAAC
116.4122	SenCell 2 mm Pt sb	116.4321	SenCell 2 mm Au HyREF
116.4222	SenCell 2 mm Pt ISAAC	116.4323	SenCell 2 mm Ag HyREF

Antec Scientific (USA)  
 info@AntecScientific.com  
 www.AntecScientific.com  
 T 888 572 0012

Antec Scientific (worldwide)  
 info@AntecScientific.com  
 www.AntecScientific.com  
 T +31 71 5813333

