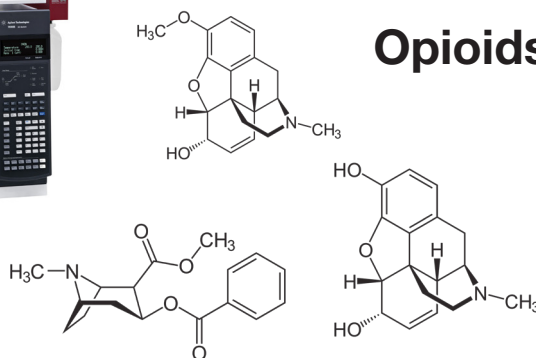



GERSTEL


GERSTEL Opioids/Cocaine Solution



Uses

The GERSTEL Opioids/Cocaine Solution is an automated solution for the quantitative determination of opioids, cocaine and metabolites in blood serum.

Characteristics

- Analysis of opioids, cocaine and metabolites from blood serum (0.6 mL)
- Complete automation of sample preparation and injection into the GC after manual protein precipitation and addition of internal standards:
 - Solid Phase Extraction (SPE),
 - Evaporation of the eluate,
 - Derivatisation,
 - Injection into a CIS,
 - GC/MS analysis
- 97 samples in one sequence
- 29 samples per day
- Calibration range:
 - Cocaine: 5-300 ng/mL,
 - Benzoylgonin: 50-1500 ng/mL,
 - Methadone: 25-1500 ng/mL
 - Morphine: 5-300 ng/mL
 - Codeine: 2.5-150 ng/mL
 - 6-Monoacetylmorphine: 2.5-150 ng/mL
 - Dihydrocodeine: 5-300 ng/mL
 - 7-Aminoflunitrazepam: 2.5-150 ng/mL

System Components

The components which are part of the system are listed below. All chemicals, the hardware and consumables required for the manual part of the sample preparation as well as the GC/MS analytical system are not included in the scope of delivery.

Also pay attention to the specification sheets of the individual system components.

Hardware

- MultiPurpose Sampler MPS Dual Head, both towers equipped with gas supply
- Solid Phase Extraction SPE for 1 mL cartridges, heating and shaking function are deactivated
- Multi Position Evaporation Station ^mVAP with condenser pump, only one evaporation position can be used
- Standard agitator
- 2× Solvent Filling Station SFS 2
- Tray for SPE cartridges, 98 positions
- Tray on standard tray holder for samples, 98 positions
- Tray on standard tray holder for eluate vials, 98 positions
- Standard wash station, 5 positions of 10 mL each
- 10 µL syringe for injection, left sampler

- 2.5 mL syringe for sample preparation, right sampler
- Consumables for one sample sequence:
 - column,
 - liner,
 - vials,
 - caps,
 - SPE cartridges

Methods

- Analysis method
- Quantification method
- Example sequence for GC MassHunter Software with integrated MAESTRO software,
- Detailed description of analysis method

System Requirements

For operation of the Opioide/Cocaine solution the system must fulfill the following requirements.

- Coupling to an 7890 GC / 5977 MSD system (Agilent Technologies). Must be configured separately (mounting hardware as well)
- Agilent Technologies MassHunter software B.07.00.1413, other versions on request
- GERSTEL Cooled Injection System CIS 4/CIS 6
- Coupling to GC or LC systems of other manufacturers possible.



Caution!

This method is for research use only, it is not for use in diagnostic procedures.



Note:

The system can only be repaired on-site, not at GERSTEL.