

METHOD AT A GLANCE

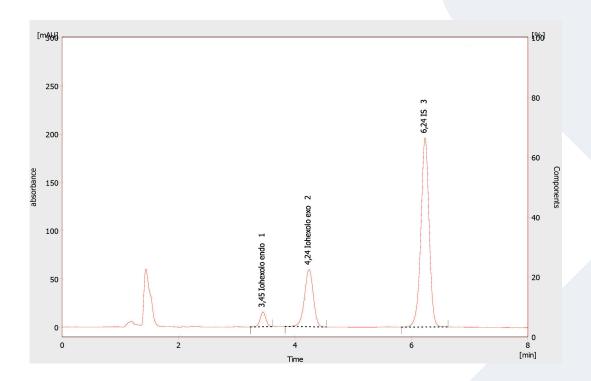
FLOCHROM® SERUM/PLASMA

IOHEXOL

IN

GFR (Glomerular Filtration Rate) determinates the speed of the glomerular filtration of the plasma through renal glomeruli. It quantitatively estimates kidney function. Kidney failure symptoms appear only when the patient has almost totally lost his renal function. The most common used parameters as creatinine, plasmatic urea and urine specific gravity, may not appear altered until the end-stage renal disease has been reached. They are considered not enough sensitive indicators, especially in people who suffering of obesity, anorexia or in organ transplant recipients.

lohexol plasma clearance is a valid and more sensitive alternative to the mostly used creatinine clearance. Iohexol is an exogenous molecule, commercially available, mainly used as contrast medium. Iohexol is eliminated only through renal way. It comes very close to fulfill all requirements for an ideal GFR marker.





METHOD AT A GLANCE

HPLC system conditions

Injection volume: 30 µL (variable according to instrumental sensitivity)

Flow rate: 1.0 mL/min Running time: 10 min

Column heater: Room temperature

UV detector: 245 nm

Column conditioning: column should be conditioned for 10 min at flow rate of 0.8

mL/min with mobile phase

Sample preparation

- Add 50 μL of serum/plasma in 1.5 or 2-mL vial
- Add 250 µL of Internal Standard
- Vortex for 30 sec
- Centrifuge for 10 min at 10000 rpm
- Collect 200 μL of supernatant and transfer into an autosampler vial. Inject 30 μL of the sample and analyze with HPLC technique

Performance

| ANALYTE | LINEARITY (µg /mL) | LLOD (µg /mL) | LLOQ (µg /mL) | CV% INTRA | CV% INTER |
|--------------|--------------------|---------------|---------------|-------------|-------------|
| Iohexol endo | 4.13 – 190 | 1.24 | 4.13 | 2.23 – 3.93 | 2.24 – 5.62 |
| Iohexol eso | 1.07 – 160 | 0.32 | 1.07 | 0.88 – 3.57 | 1.42 – 4.05 |

Ordering guide

| EUH06100 | FloChrom® Iohexol in Serum/Plasma | 100 assays |
|----------|-----------------------------------|------------|
| EUH06090 | Analytical Column | 1 pc |
| EUH06070 | Precolumns | 5 pcs |

CHR-14-19-REV.1