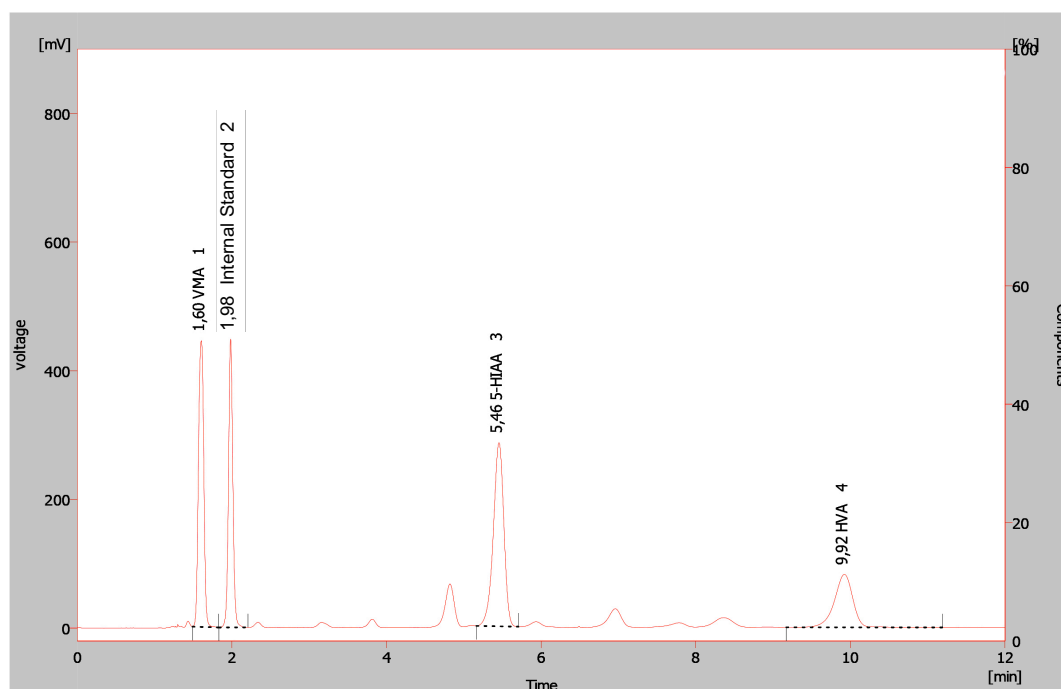


FLOCHROM[®] VMA, 5-HIAA AND HVA IN URINE

Concentration of VMA in urine is an important indicator in diagnosis and control of patients affected by pheochromocytoma.

5-HIAA is an important tumor marker of carcinoid syndrome. HVA is important in the study of neuroblastoma and in other neuroendocrine rare diseases



HPLC system conditions

Injection volume: 20 μ L (variable according to instrumental sensitivity)

Flow rate: 1.5 mL/min

Running time: 14 min

Column heater: 37°C

Fluorescence detector: 285 nm excitation, 315 nm emission

Column conditioning: column should be conditioned for 10 min at flow rate of 1.0 mL/min with mobile phase.

Sample preparation

- Pipette 1.0 mL of urine
- Add 100 µL of Internal Standard, wash well the tip and vortex
- Add 200 µL of Reagent 1
- Add a measuring cup of Reagent 2. Shake the vial until dissolution
- Add 4 mL of Reagent 3 and vortex the vial for at least 1 min. If phases separation is not clear, centrifuge for 3 min at 2000 rpm
- Collect and transfer 3 mL from upper organic phase into centrifuge tube
- Add 500 µL of Reagent 4 and vortex well for at least 1 min
- Remove carefully the upper organic phase and add 500 µL of Reagent 5
- Shake well and transfer 200 µL in a HPLC vial, collecting from the bottom of the vial and analyze with HPLC technique

Performance

ANALYTE	LINEARITY (mg/L)	LLOD(mg/L)	LLOQ (mg/L)	CV% INTRA	CV% INTER
VMA	0.20 - 50	0.06	0.20	0.12 - 1.05	4.64 - 6.47
5-HIAA	0.80 - 100	0.24	0.80	0.27 - 0.68	3.24 - 7.21
HVA	1.05 - 100	0.32	1.05	1.51 - 1.66	7.05 - 7.96

Ordering guide

EUH03100	FloChrom® VMA, 5-HIAA and HVA in Urine	100 assays
EUH03090	Analytical Column	1 pc
EUH03070	Precolumns	5 pcs