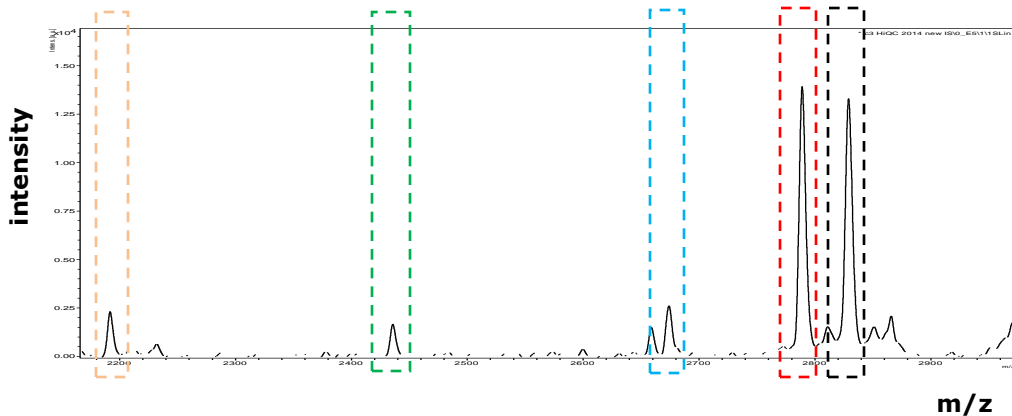


Quantitative human hepcidin-25 assay in serum, plasma & urine

Method

The assay is based on a combination of weak cation exchange chromatography and time-of-flight mass spectrometry. An internal standard (IS), heavy hepcidin-25⁺⁴⁰, is used for quantification.¹



Plasma profile of Hep-25, Hep-24, Hep-22, Hep-20 and internal standard Heavy Hep-25⁺⁴⁰ [10 nM].

Serum/plasma hepcidin-25

Reference values²: see

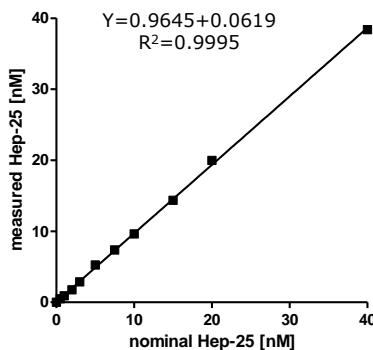
<http://hepcidin.puntkommademo.nl/provided-service/reference-values/>

Lower limit of detection (signal/noise=3): 0.5 nM

Coefficient of variation:

Intra assay range: 2.1–3.5%

Inter assay range: 4.6–8.3 %



Linearity curve

Hepcidin-25 in plasma

Urine hepcidin-25

Reference values ³	n	Mean ± SD	Median	Min	Max
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	n	Mean ± SD	Median	Min	Max
All (5 tp's)	24	1.1 ± 1.5	0.6	0.01	10.6
Male (5 tp's)	11	1.0 ± 1.1	0.6	0.04	5.1
Female (5 tp's)	13	1.2 ± 3.4	0.5	0.01	10.6
All first morning samples	24	0.6 ± 0.8	0.3	0.01	3.8

Tp, time point

Lower limit of detection (signal/noise=3): 50 pM

Coefficient of variation:

Intra assay range: 3–7%

Inter assay range: 10–13%

References

1. Laarakkers *et al* (2013) PLoS ONE 10:e75518
2. Galesloot *et al* (2011) Blood 117: e218-25
3. Kroot *et al* (2009) Anal Biochem 389:124-129

