

quantex Ferritin

Kit Configuration

P/N 3000-2271	1 x 100 mL Ferritin R1
	3 x 7 mL Ferritin R2

Reagent Preparation

P/N 3000-2271	Ferritin R1: Ready to use
	Ferritin R2: Ready to use. Invert to mix well before the first use. Avoid foam formation.
	Place the bottles into reagent tray.

In Use Stability

For optimal stability remove reagents from the system and store them at 2-8°C in the original vial securely closed.
On board: 30 days.

Specimen

Serum.

Calibration

Use quantex FERRITIN standard multipoint Cat. No 3000-2223. See vial label for lot specific concentrations. The 1000 ng/mL standard should not be used for the calibration, but it may be used as prozone control. A reagent blank should be run daily before sample analysis. Recalibrate every 30 days or when a new lot of reagent is used.

Quality Control

Use quantex Ferritin/Myoglobin/IgE Control I/II Cat. No. 3000-2222.

Calculation of Analytical Results

The results concentration is automatically calculated by the instrument against the Calibration curve. For detailed description, refer to the Instrument settings and to the ILab 600/650 Operator's Manual.

Reference Interval

Ferritin is considered normal within the following concentrations:

Children and adolescent 15 – 120 ng/mL

Men 30 – 300 ng/mL

Women under 50 years old 15 – 160 ng/mL

Women over 50 years old 20 – 300 ng/mL

Reference ranges may vary with age and sex.

References / Literatur / Bibliografia / Bibliographie / Bibliografia /

See package insert enclosed in the kit

Performance Characteristics

Limitation/Interfering Substances

Interference up to 10% is observed from lipemia for sample with 1000 mg/dL triglycerides (11.3 mmol/L). No significant interference from bilirubin up to 20 mg/dL (340 µmol/L) and hemoglobin up to concentrations of 500 mg/dL (0.30 mmol/L). For a comprehensive review of interfering substances, refer to the publication by Young *et al.*¹

Precision

	Samples/Runs	Mean (ng/mL)	CV(%)	Mean (ng/mL)	CV(%)
Within run	5/6	116.7	0.7	440	0.4
Total	5/6	116.7	1.1	440.	1.0

Method Comparison

Comparison method	Another Biokit latex reagent
Comparison instrument (x)	ILab 900/1800
Slope	0.910
y intercept	4.64
Range (ng/mL)	12 - 1988
Mean X (ng/mL)	199.5
Mean Y (ng/mL)	186.2
r	0.997
Syx	22.8
n	90

Linearity

no rerun 15 - 500 ng/mL ; with rerun 15 - 1875 ng/mL

Instrument Settings

Photometric Test Parameters		Serum
Test No.		**
Test Name, Test Code		Ferritin, FER
Sample Type		Serum
Reporting Unit, Decimal Points		ng/mL, 1
Reaction Cycle		Standard
Twin Analysis		OFF
Methodology Type, Measuring Point		End Point, 20/33
Photometric Methodology		1 Wavelength
Primary/Secondary Wavelength		570
Sampling Conditions		
Sampling 1	Sample Vol.	25
	Sample/Diluent Vol.	0/0
Sampling 2	Sample Vol.	25
	Sample/Diluent Vol.	10/90
Sampling 3	Sample Vol.	***
	Sample/Diluent Vol.	0/0
Sampling 4		***
Diluent Code		Saline
Diluent Warning Limit		***
First Run		Sampling 1
Below/Above Normal Range		***
Panic L		***
Panic H		Sampling 2
Noise		***
Prozone		N/A
High!, ABS!		Sampling 2
Sample Volume Reduction		**
Reagent Volumes		
R1	Code	01831
	Rgt/Dil. Vol. Stirring	160/0, ON
	Low Vol. Warning Limit	***
	Stability (days)	30
R2	Code	01832
	Rgt/Dil. Vol. Stirring	50/0, ON
	Low Vol. Warning Limit	***
	Stability (days)	30

Ranges and Evaluation Criteria	Serum
Normal Range-Male	30 - 300**
Normal Range-Female	15 - 300**
Normal Range-Other	**
Valid Range	0** - 500
Hemolysis/Icterus/Lipemia Limit	***
Reaction Slope	Positive
Absorbance Limit	Above, 3200
Prozone Limit	N/A
Non Linear Limit	N/A
Slope/Intercept Correction	1/0
Qualitative Report	OFF
Calibration Conditions	
Calibration	5 Points, point to point, 2 Reps
Stability (days)	30
Calibrator, Concentration	Std FER, * (0 Saline)
R-Blank Limit (mAbs)	1700
Cal. Reps Range (%)	***
Min Cal. Response (mAbs)	***
Cal. Factor Change (%)	***
M-Point Curve Fit (%)	N/A
Reagent Blank	ON
Auto R-Blank by Bottle	ON

- * Lot dependent
- ** operator definable
- *** optional
- N/A not applicable to this test