

quantex A-1-ANTITRYPSIN (A1AT)



Kit Configuration

P/N 3000-2306	1 x 35 mL A1-AT R1
	2 x 4 mL A1-AT R2

Reagent Preparation

P/N 3000-2306	A1-AT R1: Ready to use
	A1-AT R2: Ready to use.
	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.

Specimen

Serum.

Calibration

Use quantex Proteins standard multipoint Cat. No 300-2128. See calibrator chart for lot specific concentrations. Recalibrate every 90 days or when a new lot of reagent is used.

Quality Control

Use quantex Proteins Control I/II Cat. No. 3000-2122.

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 350 Operator Manual.

Reference Interval

The reported expected range for alpha1-antitrypsin in adults is 90-200 mg/dL (0.9-2.0 g/L).

References / Literatur / Bibliografia / Bibliographie / Bibliografia /

See package insert enclosed in the kit

Performance Characteristics

Limitation/Interfering Substances

No significant interference from triglycerides up to concentrations of 2000 mg/dL, bilirubin up to concentrations of 20 mg/dL and hemoglobin up to concentrations of 500 mg/dL.

For a comprehensive review of interfering substances, refer to the publication by Young *et al.*¹

Precision

Serum	Samples/Runs	Mean (mg/dL)	CV(%)	Mean (mg/dL)	CV(%)
Within run	4/10	74	4.2	235	3.4
Total	4/10	74	5.2	235	4.8

Method Comparison

Comparison Method (x)	Nephelometric assay
Comparison Instrument and Reagent (x)	Nephelometer (Behring, BN II)
Slope	1.440
y intercept	-26.0
Range (mg/dL)	19 - 327
Mean X (mg/dL)	154.7
Mean Y (mg/dL)	196.8
r	0.941
n	100

Linearity

no rerun 32 - 300 mg/dL ; with rerun 32 - 2400 mg/dL

Minimum Detection Limit

3.7 mg/dL

Quantification Limit

32 mg/dL



Instrument Settings

Chemistry Parameters				R1			
Method	<input type="text"/>	Reagent Name	<input type="text" value="A1AT"/>	Volume	<input type="text" value="190 μL"/>		
Name	<input type="text" value="A1AT"/>	R2	<input type="text" value="enable"/>	Reagent Name	<input type="text" value="A1AT"/>	Volume	<input type="text" value="50 μL"/>
Unit	<input type="text" value="mg/dL"/>	Wash	<input type="text" value="disable"/>	Reagent Name	<input type="text"/>		
Assay Type	<input type="text" value="End"/>	Diluent	<input type="text" value="enable"/>	Reagent Type	<input type="text"/>		
		Reagent Name	<input type="text" value="Saline"/>				
Measuring Points	1 enable	start	<input type="text" value="12"/>	Decimal Points	<input type="text" value="0"/>		
		end	<input type="text" value="13"/>	Normal Range	<input type="text" value="90"/>	<input type="text" value="200"/>	
	2 enable	start	<input type="text" value="25"/>				
		end	<input type="text" value="26"/>				
Wave Length					Technical Range (Conc)		
Prim	<input type="text" value="600"/>	Sec	<input type="text"/>	mAbs/10		<input type="text" value="0.0"/>	<input type="text" value="300"/>
Sampling Volume	<input type="text" value="2 μL"/>				<input type="text" value="-30000 / 30000"/>		
Dilution	<input type="text" value="disable"/>		RPT Wash	(R1)	<input type="text" value="Sys Water"/>		
	<input type="text"/>	<input type="text"/>	(R2)	<input type="text" value="Sys Water"/>			
Rerun (High)	<input type="text" value="2 μL"/>		Instrument Factor a	<input type="text" value="1"/>	b	<input type="text" value="0"/>	
Dilution	<input type="text" value="enable"/>	Stirring Speed		R1	<input type="text" value="high"/>	R2	<input type="text" value="high"/>
	<input type="text" value="20 μL"/>	<input type="text" value="140 μL"/>					
Rerun (Low)	<input type="text" value="4 μL"/>						

Calibration Checks

** Duplicate Limit	**	mAbs/10	Sampling Method for Standards				
** Sensitivity Limit	**	mAbs/10	<input checked="" type="checkbox"/>	Duplicate			
			<input type="checkbox"/>	Triplicate			
** Linearity Limit	**	%					
** Prozone Limit	**	<input type="text" value="upper"/>	Blank measurement				
SL1-S	**	<input type="text" value="SL1-F **"/>	<input checked="" type="checkbox"/>	Enable Reagent blank			
SL2-S	**	<input type="text" value="SL2-F **"/>	<input type="text" value="None"/>				
Sens	**	mAbs/10	<input checked="" type="checkbox"/>	Reagent blank measurement at calibration			
			<input type="checkbox"/> Reagent blank (system water)				
<input checked="" type="checkbox"/> Absorbance Limit	**	Multiplex measurement is the same as standards					
Reaction	<input type="text" value="Increase"/>		Reagent Blank Limit Checks				
Limit	<input type="text" value="25000"/>	mAbs/10	**	Duplicate limit		<input type="text" value="50"/>	mAbs/10

Calibration

Method	<input type="text"/>	Name	<input type="text" value="A1AT"/>	Interval	<input type="text" value="90"/>	days
Calculation	<input type="text" value="Point to Point"/>					
	Conc	WORK	MASTER	Lot No		
S1	<input type="text" value="0"/>	<input type="text" value="-1"/>			K	<input type="text" value="N/A"/>
S2	<input type="text" value="30"/>	<input type="text" value="990"/>				
S3	<input type="text" value="76"/>	<input type="text" value="2912"/>				
S4	<input type="text" value="152"/>	<input type="text" value="5574"/>				
S5	<input type="text" value="228"/>	<input type="text" value="8357"/>				
S6	<input type="text" value="304"/>	<input type="text" value="10382"/>				

Reagent Registration

Reagent Code	<input type="text" value="0179"/>													
Reagent Name	<input type="text" value="A1AT"/>													
R1	<input checked="" type="checkbox"/>	enable	Volume (L)	<input type="text" value="**"/>	mL	Volume (S)	<input type="text" value="**"/>	mL	Stability Check	<input checked="" type="checkbox"/>	enable	Term	<input type="text" value="**"/>	days
R2	<input checked="" type="checkbox"/>	enable	Volume (L)	<input type="text" value="**"/>	mL	Volume (S)	<input type="text" value="**"/>	mL	Stability Check	<input checked="" type="checkbox"/>	enable	Term	<input type="text" value="**"/>	days

** Operator definable N/A not applicable to this test Calibration curve is only as example