

## quantex sTfR

### Kit Configuration

P/N 3000-2300	1 x 45 mL s TfR R1
	1 x 4 mL s TfR R2

### Reagent Preparation

P/N 3000-2300 s TfR R1: Ready to use.  
 s TfR R2: Reconstitute with 4 mL of NCCLS Type II water. Invert to mix before use. Transfer the reagent in an empty vial.  
 Place the bottles into reagent tray.

### In Use Stability

RUBE R1: Until Expiration date.  
 RUBE R2: 60 days stored at 2-8°C  
 For optimal stability remove reagents from the system immediately after use, and store them at 2-8°C in the original vial securely closed.

### Specimen

Serum.

### Calibration

Use quantex sTfR standard multipoint Cat. No 300-2301. The calibrator concentrations are indicated on the vial labels. Recalibrate every 22 days or when a new lot of reagent is used.

### Quality Control

Use quantex sTfR Control I/II Cat. No. 3000-2302.

### 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 I Lab 350 Operator Manual.

### Reference Interval

The normal values for adults are about 0.90 - 2.30 mg/L. These values may be exceeded up to 20 times in iron deficiency. Serum sTfR may also be elevated in hemolytic anemia, polycythaemia and thalasemia without iron deficiency.  
 In any case, these concentrations are only indicatives and each laboratory should establish its own reference range.

### References / Literatur / Bibliografía / Bibliographie / Bibliografia /

See package insert enclosed in the kit

## Performance Characteristics

### Limitation/Interfering Substances

No significant interference from bilirubin up to concentrations of 20 mg/dL (342 μmol/L) hemoglobin up to concentrations of 500 mg/dL (0.3 mmol/L), triglycerides up to concentrations of 23 mmol/L and rheumatoid factor up to 500 IU/mL.  
 For a comprehensive review of interfering substances, refer to the publication by Young *et al.*<sup>1</sup>

### Precision

	Samples/Runs	Mean (mg/L)	CV(%)	Mean (mg/L)	CV(%)
Within run	4/10	1.45	2.4	5.29	1.8
Total	4/10	1.45	3.9	5.29	4.5

### Method Comparison

Comparison Method (x)	ELISA assay
Slope	1.16
y intercept	0.099
Mean X (mg/L)	2.38
Mean Y (mg/L)	2.86
r	0.96
n	95

### Linearity

no rerun 0.06- 8.5 mg/L ; with rerun 0.06- 85 mg/L

### Minimum Detection Limit

0.04 mg/L

### Quantification Limit

0.06 mg/L

### Instrument Settings

<b>Chemistry Parameters</b>				<b>R1</b>			
<b>Method</b>	<input type="text"/>	<b>Reagent Name</b>	<input type="text" value="sTfR"/>	<b>Volume</b>	<input type="text" value="180 μL"/>		
<b>Name</b>	<input type="text" value="sTfR"/>	<b>R2</b>	<input type="text" value="enable"/>				
<b>Unit</b>	<input type="text" value="mg/L"/>	<b>Reagent Name</b>	<input type="text" value="sTfR"/>	<b>Volume</b>	<input type="text" value="25 μL"/>		
<b>Assay Type</b>	<input type="text" value="End"/>	<b>Wash</b>	<input type="text" value="disable"/>	<b>Reagent Name</b>	<input type="text"/>		
		<b>Diluent</b>	<input type="text" value="enable"/>	<b>Reagent Type</b>	<input type="text" value="Saline"/>		
<b>Measuring Points</b>	<input type="text" value="1 enable"/>	<b>start</b>	<input type="text" value="14"/>	<b>Decimal Points</b>	<input type="text" value="2"/>		
		<b>end</b>	<input type="text" value="15"/>	<b>Normal Range</b>	<input type="text" value="0"/>	<input type="text" value="2.3"/>	
	<input type="text" value="2 enable"/>	<b>start</b>	<input type="text" value="25"/>				
		<b>end</b>	<input type="text" value="26"/>				
<b>Wave Length</b>				<b>Technical Range (Conc)</b>	<input type="text" value="0.0"/>	<input type="text" value="8.5"/>	
<b>Prim</b>	<input type="text" value="600"/>	<b>Sec</b>	<input type="text"/>	<b>mAbs/10</b>	<input type="text" value="-30000 / 30000"/>		
<b>Sampling Volume</b>	<input type="text" value="12 μL"/>						
<b>Dilution</b>	<input type="text" value="disable"/>	<b>RPT Wash</b>	(R1)	<input type="text" value="Sys Water"/>			
	<input type="text" value="μL"/>		(R2)	<input type="text" value="Sys Water"/>			
<b>Rerun ( High)</b>	<input type="text" value="12 μL"/>						
<b>Dilution</b>	<input type="text" value="enable"/>	<b>Instrument Factor a</b>	<input type="text" value="1"/>	<b>b</b>	<input type="text" value="0"/>		
	<input type="text" value="15 μL"/>	<input type="text" value="135 μL"/>	<b>Stirring Speed</b>	R1	<input type="text" value="high"/>		
<b>Rerun ( Low)</b>	<input type="text" value="24 μL"/>						

### Calibration Checks

<b>** Duplicate Limit</b>	<input type="text" value="**"/>	mAbs/10	<b>Sampling Method for Standards</b>				
<b>** Sensitivity Limit</b>	<input type="text" value="**"/>	mAbs/10	<input checked="" type="checkbox"/>	Duplicate			
			<input type="checkbox"/>	Triplicate			
<b>** Linearity Limit</b>	<input type="text" value="**"/>	%					
<b>** Prozone Limit</b>	<input type="text" value="**"/>	upper	<b>Blank measurement</b>				
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	<input type="text" value="**"/>	mAbs/10	<b>Reagent blank measurement at calibration</b>				
<b>x Absorbance Limit</b>	<input type="text" value="**"/>		<input checked="" type="checkbox"/>	Reagent blank (system water)			
<b>Reaction Limit</b>	<input type="text" value="Increase"/>		<b>Multiplex measurement is the same as standards</b>				
<b>Limit</b>	<input type="text" value="25000"/>	mAbs/10	<b>Reagent Blank Limit Checks</b>				
			<input type="text" value="**"/>	Duplicate limit			
			<input type="text" value="50"/>	mAbs/10			

### Calibration

<b>Method</b>	<input type="text"/>	<b>Name</b>	<input type="text" value="sTfR"/>	<b>Interval</b>	<input type="text" value="22"/>	days
<b>Calculation</b>	<input type="text" value="Linear"/>					
	Conc	WORK	MASTER	Lot No		
S1	<input type="text" value="0"/>	<input type="text" value="-3"/>			<b>K</b>	<input type="text" value="N/A"/>
S2	<input type="text" value="0.66"/>	<input type="text" value="396"/>				
S3	<input type="text" value="1.33"/>	<input type="text" value="875"/>				
S4	<input type="text" value="2.82"/>	<input type="text" value="1898"/>				
S5	<input type="text" value="5.95"/>	<input type="text" value="4324"/>				
S6	<input type="text" value="8.73"/>	<input type="text" value="7016"/>				

### Reagent Registration

<b>Reagent Code</b>	<input type="text" value="0187"/>						
<b>Reagent Name</b>	<input type="text" value="sTfR"/>						
	<b>Volume (L)</b>	<b>Volume (S)</b>	<b>Stability Check</b>	<b>Term</b>			
R1	<input checked="" type="checkbox"/> enable	<input type="text" value="**"/> mL	<input checked="" type="checkbox"/> enable	<input type="text" value="**"/>	days		
R2	<input checked="" type="checkbox"/> enable	<input type="text" value="**"/> mL	<input checked="" type="checkbox"/> enable	<input type="text" value="**"/>	days		
** Operator definable		N/A not applicable to this test		Calibration curve is only as example			