

Reagent for Measuring Rheumatoid factor by Latex Agglutination

RF-LATEX(X1)"SEIKEN"

Rheumatoid factor (RF) is an autoantibody against human IgG commonly seen in sera at a high concentration in some conditions, particularly in patients with rheumatoid arthritis. The measurement of RF value is useful in evaluating the diagnosis, effects of therapy and prognosis of RA, systemic lupus erythematosus, chronic hepatopathy, etc. This reagent has been designed to accurately and reproducibly measure blood RF using latex agglutination.

CHARACTERISTICS

1. No need to dilute serum samples
2. No reagent preparation
3. Easily applied to various analyzers.

CONTENTS

1. Latex suspension

0.17 w/v% suspension of latex particles sensitized with denatured human IgG

2. Buffer solution

Glycine buffer solution

PRINCIPLE OF MEASUREMENT

When an antigen-antibody reaction occurs between RF in a sample and denatured human IgG which has been adsorbed to latex particles, agglutination results. This agglutination is detected as an absorbance change (550~660 nm), with the magnitude of the change being proportional to the quantity of RF in the sample. The actual concentration is then determined by interpolation from a calibration curve prepared from calibrators of known concentration.

METHOD OF USE

1. Materials and reagents necessary for the test

- 1) Automated chemical analyzer
- 2) RF CALIBRATORS (sold separately from Denka Seiken)

2. Reagent and sample preparation

- 1) The test does not require reagent or sample pretreatment.
- 2) Preparation of physiological saline : dissolve 0.9g sodium chloride in distilled water and bring to a final volume of 100mℓ.

3. Operating parameters

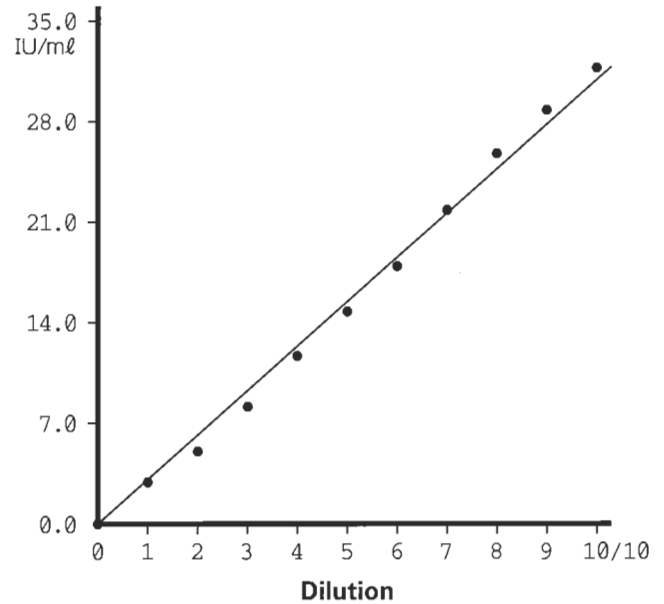
RF should be measured according to the operating procedures of the instrument in use.

REFERENCE DATA

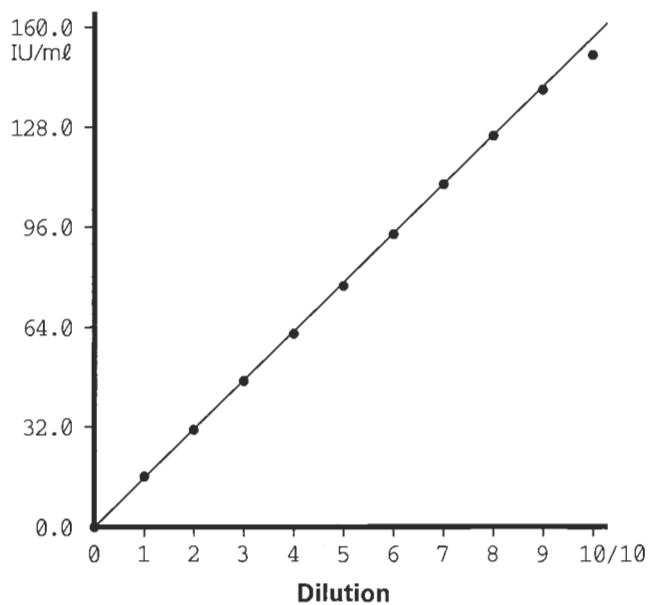
Within-run reproducibility

Sample	Low	High
N	20	20
Mean	25.44	61.36
Max	26.1	61.7
Min	24.7	60.8
Range	1.4	0.9
S.D	0.37	0.28
C.V	1.46%	0.45%

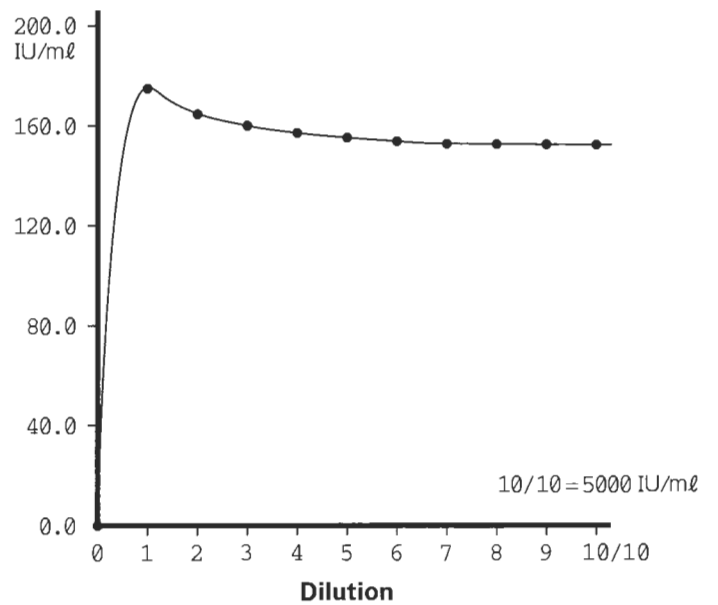
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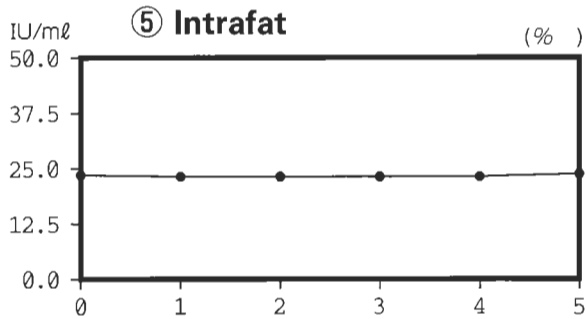
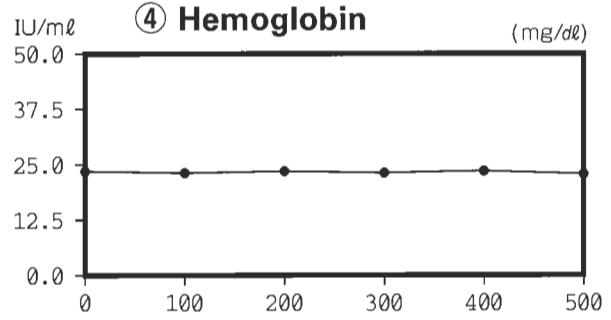
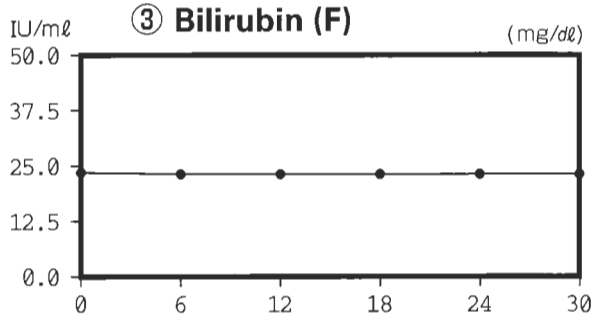
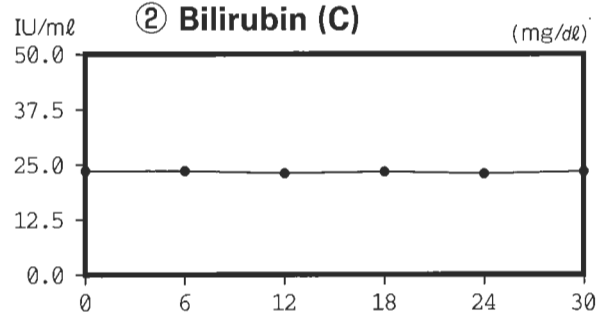
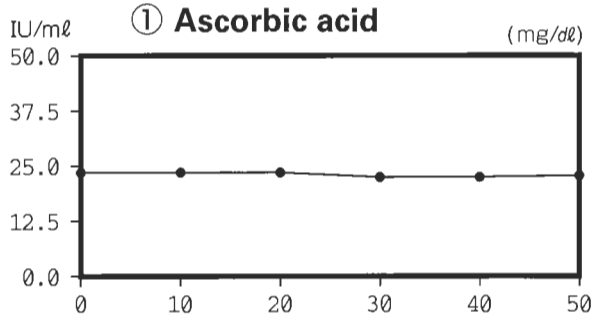
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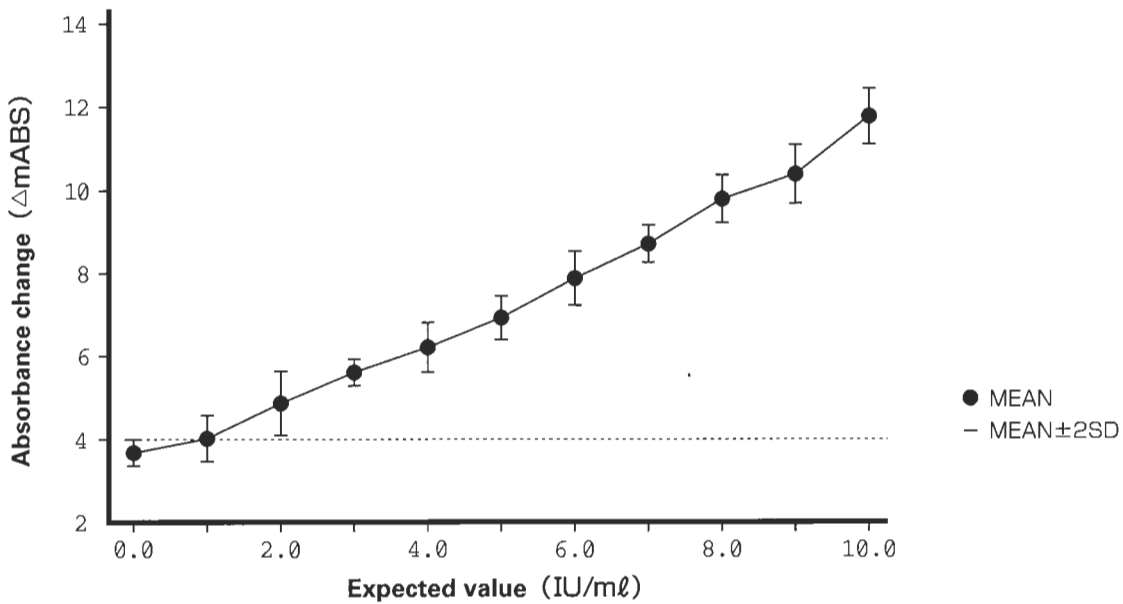
Prozone



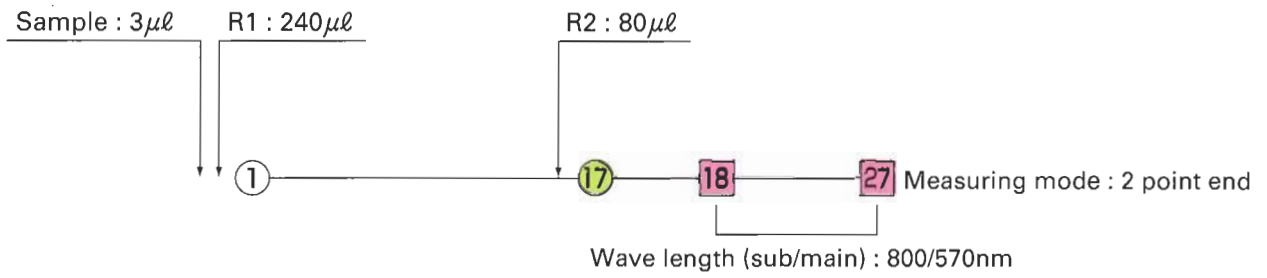
Interfering substances



Minimum detection limit



Application diagram for Hitachi 917



Reference normal value

Under 18 IU/ml (in-house data)