‘EIKEN’ SERUM AMYLOID A (SAA)

Latex Agglutination Assay for measurement of SAA protein in blood serum

Serum Amyloid A (SAA) is an early and sensitive blood biomarker for tissue injury and inflammation and has been indicated in many inflammatory diseases e.g. amyloidosis, atherosclerosis and rheumatoid arthritis.

The level of SAA circulating in the blood is known to increase dramatically in response to tissue damage or inflammation, classifying it as an acute phase protein.

‘Eiken’ SAA latex agglutination test is a quick, simple test which enables the optical measurement of the change in turbidity caused by the agglutination of the latex particles sensitised with SAA antibodies.

- Suitable for use with automated analysers
- Maximum use of laboratory resources and increased turnaround
- Rapid, sensitive and simple assay
- Permits early detection of tissues injury and inflammation
- Range of calibrator standards of known concentration
- Confidence in performance
- Only 2 reagents, latex and buffer
- Minimises user error
- Suitable for Veterinary use
- Applicable for a wide range of animals
Product code and description

LZ Test ‘Eiken’ SAA
G-SZ71

Contents

1. Reagent 1 – 2 x 20ml
   Buffer solution
   Contains 50 mmol/L of Good’s buffer.

2. Reagent 2 – 2 x 20ml
   Latex reagent
   Contains 40 vol % of latex sensitized with anti-human SAA antibodies*.
   * This is an abbreviation of the following: latex sensitized with anti-human SAA rabbit polyclonal antibodies and anti-human SAA mouse monoclonal antibodies.

LZ-SAA Standard Q ‘Eiken’
G-SZ75

Contents

6 x 1ml calibration standard of different concentrations

Storage and shelf life

Store at 2-10°C.

Expiration is one year from date of manufacture

Test Principle

This procedure is an optical measurement method using a latex agglutination reaction and an automated analyser but also may be performed manually

The latex reagent is prepared by bonding anti-SAA antibodies to the surface of the latex particles. When this reagent is mixed in a cell to react with the sample, the anti-SAA antibodies that were bonded to the latex particles react with the SAA in the sample, causing agglutination. This reaction is then measured as a change in turbidity, with the amount of the change increasing in proportion to higher concentrations of SAA in the sample.

Measurement using LX Test ‘Eiken’ SAA applies this principle to find a calibration curve from standards of known concentration. The amount of SAA in the sample is then found relative to this standard.

Performance

1. Normal reference value of this method is less than 8 µg/ml.
2. Assay range of this method is 5 - 500 µg/ml.
3. Accuracy - When the known concentration sample is measured, the accuracy of this method is 85 - 115 %.
4. Reproducibility - When the same sample is measured 10 times simultaneously, the coefficient of variation (CV) is less than 10%.
   Correlation - When 57 samples are measured by this method and an in-house reference method, the correlation coefficient (r) is r = 0.981, and the regression line is y = 0.971x +2.7. (y: Eiken method, x: reference method)
5. The result is not affected by bilirubin, haemoglobin, chyle or Rheumatoid Factor

NOTE: Protocols, for various analysers and a manual method, are available on application

References


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