IgE

Quantitative turbidimetric latex assay for the measurement of IgE

[General attention]

- 1. This reagent is for in vitro diagnostic use, and do not use for other purpose.
- 2. The doctor in charge along with clinical conditions and other laboratory results, etc. must judge the clinical diagnosis based on the result of a measurement overall.
- 3. Please use it according to use and the dosage regimen described in the package insert. The reliability of the result of a measurement cannot be guaranteed when use excluding described use and dosage regimen.

..... Liquid

[Reagent Composition]

- 1. Buffer (R1)
- 2. Latex reagent (R2) Liquid

(Anti-human IgE (mouse) monoclonal antibody sensitized latex)

[Intended use]

Measurement of IgE in serum or plasma sample

[Principle]

1. Principle of measurement

Antibody adsorbed latex particles and IgE in the sample react immunologically, and causing the latex particles to agglutinate. This agglutination results in a change of turbidity, and the change in absorbance is a measure of the amount of IgE in the sample.

- 2. Feature
 - 1. Measurement principle is latex immuno turbidimetric assay.
 - 2. It is possible to adjust to various general-purpose automatic analyzers.
 - 3. unnecessary for preparation of reagent
 - 4. The preprocessing of the sample (dilution of the sample) is unnecessary.

[Handling Precautions]

1. Measurement sample

Please use the fresh serum or plasma as a specimen for measurement. Please measure them within 2 weeks, if stored at refrigerated condition of 2-8°C. Otherwise it may not be measured definitely.

2. Interfering substance etc.

The following components hardly interfered with the test result: chyle (up to formazin turbidity 1430), bilirubin F ≤20.8mg/dL, bilirubin C ≤20.0mg/dL, hemoglobin 484mg/dL, RF ≤500IU/mL, citric acid 15.0mg/mL, heparin 150U/mL and EDTA 1.5mg/mL.

- 3. Others
 - a. Storage reagents at (2-10°C), and the freezing preservation must be avoid
 - b. Please request material separately about the adaptation example to various automated analyzers.

[Procedure]

- 1. Preparation of the reagents
- Buffer solution (R1) and Latex reagent (R2) are used as it is. 2. Stability

The reagents will remain stable until the expiration date printed on the label, when stored tightly closed at 2-10 °C and contaminations are prevented during their use.

3. Procedure

[Standard procedure]

Sample 6µL		Measure opti Main 570 nn Sub 800 nm	n Main 570 nm
R1 120µL	R2 60µ	ıL	
\downarrow	Ļ	↑	1
0	5	5.3	10
(Reaction temp.: 37°C)			(Reaction time: min.)

4. Calibration

Using optional IgE calibrator and measure them as sample based on the above-mentioned procedure, and made the calibration line.

[Judgment method of result]

(1) Normal reference values (1)

10-340 IU/mL

 $\$ Please set the normal range in each institution

(2)The nonspecific reaction can happen in various infectious diseases and autoimmune disease patients' serums. Please judge the diagnosis based on the result of a measurement overall in consideration of other inspections and clinical conditions.

[CLINICAL SIGNIFICANCE]

IgE is an immunoglobulin present in trace amounts in the blood, and have been found an antibody comprising a reagin activity by Ishizaka et al. in 1966. Blood concentration of IgE varies at bronchial asthma, atopic dermatitis, allergic disease, and is clinically important in the diagnosis of these diseases.

[PERFORMANCE] **1. ANALYTICAL PERFORMANCE**

- 1. Sensitivity

When measure IgE levels of 0 IU / mL and 10 IU / mL samples each five samples , and calculate each average value X0, X10, each standard deviation SD0, SD10, then (X10-2SD10) is larger than (X0 + 2SD10).

2. Accuracy

When measured the control serum of known concentration is measured, measurement value is within ±10% of the known value.

3. Reproducibility

When measure the same sample five times at the same time, the C.V of the absorbance value is 10% or less.

- 4. Measurement range Measurement range of the IgE in the sample is 10-3000 IU /mL
- measured by Hitach7170. 5. Standard material for calibration

WHO International Standard second 75/502

[Attention in handling for use]

1. Attention in handling (dangerous prevention)

- (1) An infectious microorganism such as hepatitis B viruses might exist in the sample, please handle it assuming that there is a risk for infection.
- (2) Sodium azide of 0.09w/v% is contained in the reagents as preservative. When entering eyes and mouths or adhering to the skin by mistake, flushing enough them with water as a stop-gap measure. If there is a necessity receive the doctor's treatment.
- 2. Directions
 - (1) Do not use the reagents after the expiration date.
 - (2) After open the reagents, use them as early as possible. When preserve them, please close the lid and preserve on a specified condition.
 - (3) Please do not use the bottle and the accessory in this kit for other purposes.
 - (4) Please set the buffer and the latex reagent at the position correctly after gently mixing by invert the bottle before measure. Please remove the bubble when bubbling.
 - (5) When the measurement value exceeds the measure range, please dilute with saline liquid, and measure the specimen material. Those obtained by multiplying the dilution factor in value is the measured value.
 - (6) Please do not use the reagent with different lot.
 - (7) Please make the working curve at each measurement. Moreover, please measure the calibration sample for two times or more respectively.
 - (8) Please use the calibrator sold separately, and refers to the manual of the goods before use.
 - (9) Preserve the reagent at refrigerated condition (2-10°C)and avoid the freezing.
- Attention for Disposal
 - (1) Sodium azide of 0.09w/v% is contained is contained in the reagents as preservative. The sodium azide might generate the metallic azide that it reacts with the lead pipe and the copper pipe and explosiveness is strong, and flush it in volumes of water, please when you abandon it.
 - (2) An infectious microorganism such as hepatitis B viruses might exist in the sample, and process a used sample, the reagent container, and apparatus, etc. by sterilization, disinfection (0.5% solution of sodium hypochlorite), and incineration, etc.
 - (3) Please process it according to regulations of Wastes Disposal and Public Cleaning Law and Water Pollution Control Law, etc. when you abandon and apparatus, etc.

[Storage and validity period]

- 1. Storage ∶ 2~10°C
- 2. Validity period : 1 year after production Expiration date is displayed on the outer box and bottle labels.

[Package]

Product Name	Contents
IgE reagent	
Buffer (R1)	40mL ×1
Latex reagent (R2)	20mL ×1

[Optional goods]

(Product Name) (Contents)

IgE Calibrator 6 conc. x 1mL each

IgE Control 2 concentrations ×2mL each

The indicated value is displayed on the label

[References]

- 1) Sakurabayash, et al. : Kensa to Gijutsu. 16, $607{\sim}613$, (1988).
- 2) Mori, et al.: Kensa to Gijutsu. 16, 641~644, (1988).

[Inquiries]

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[Manufacturing and distribution]

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