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Diazyme Adenosine Deaminase Calibrator

Intended Use

Diazyme Adenosine Deaminase Calibrator is intended to be used for calibration of Diazyme Adenosine Deaminase Assay. The calibrator is used in the calculation of adenosine deaminase concentrations in unknown plasma and serum samples.

Summary

The Diazyme Adenosine Deaminase (ADA) Calibrator **CALIBRATOR** is one lyophilized calibrator. The **CALIBRATOR** and distilled water are to be used for calibration of the Diazyme ADA Assay ([REF](#) DZ117A). The Diazyme ADA Assay is based on the enzymatic deamination of adenosine and after many reactions quinone dye is generated, which is monitored in a kinetic manner.

Reagents – Working Solutions

Reactive components

- Bovine serum and additives

Non-reactive components

- Sodium azide (NaN_3) <0.1%

The **CALIBRATOR** is supplied in lyophilized form (1 x 1 mL). The **CALIBRATOR** is manufactured from bovine serum base. The concentration of the calibrators is lot specific and the ADA concentration is expressed in U/L.

Calibrator values

The exact **CALIBRATOR** values are given on the available Certificate of Analysis.

Precautions and Warnings

1. USA: For Research Use Only. Not to be used in diagnostic procedures.
2. EU: CE IVD
3. For use with Diazyme Adenosine Deaminase Assay ([REF](#) DZ117A).
4. For Laboratory Reagent Use Only. Do Not Feed to Cattle or Other Ruminants.
5. Product contains highly purified bovine source material from non-BSE countries. The manufacturing facility does not receive, store or process ruminant materials from restricted countries.
6. Possible infectious agents in the materials have been inactivated. Because no method can offer complete assurance as to the absence of infectious agents, this material should be handled as though capable of transmitting infectious disease and disposed as biohazard waste or medical waste according to applicable local and national laws.
7. Additional safety information concerning storage and handling of this product is provided within the Material Safety Data Sheet for this product. To obtain an MSDS, please contact our customer service department at 858-455-4768.
8. Avoid contact with skin and eyes.

9. Contains sodium azide, which may react with lead or copper plumbing to form explosive compounds. Flush drains with copious amounts of water when disposing of this reagent.

Handling

The **CALIBRATOR** is supplied in lyophilized form. Add 1.0 mL of distilled water to the vial. Close vial and let stand at room temperature for 30 minutes, dissolving contents completely by gently swirling or rotating. Mix carefully before each use.

Storage and Stability

Store at -20°C . *Note:* Store **CALIBRATOR** tightly capped when not in use.

Stability

- Unopened vials: stability is up to the expiration date on label when stored at -20°C .
- After reconstitution: stability is 7 days when stored at 2 to 8°C

Materials Provided

The **CALIBRATOR** consists of 1 lyophilized vial.

Materials required (but not provided)

- Diazyme Adenosine Deaminase Assay reagents ([REF](#) DZ117A)
- Distilled water
- 0.9% saline solution
- General laboratory equipment

Assay

Use 0.9% saline solution as level 0 and the Diazyme ADA Calibrator as **CALIBRATOR** 1 for the Diazyme ADA Assay. Prepare standard as stated in the Handling section. The use of a 1.0 mL pipette is recommended. Take care to avoid the formation of bubbles. *Note:* A saline solution is required to generate a 2-point calibration.

References

1. Kobayashi F, Ikeda T, Marumo F, Sato C: Adenosine deaminase isoenzymes in liver disease. *Am. J. Gastroenterol.* 88: 266-271 (1993)
2. Kalkan A., Bult V., Erel O., Avci S., and Bingol N. K.: Adenosine deaminase and guanosine deaminase activities in sera of patients with viral hepatitis. *Mem Inst. Oswaldo Cruz* 94(3) 383-386 (1999)
3. Burgess LJ, Maritz FJ, Le Roux I, et al. Use of adenosine deaminase as a diagnostic tool for tuberculous pleurisy. *Thorax* 50: 672-674 (1995)
4. Lakkana B., Sasisopin K: Use of Adenosine Deaminase for the Diagnosis of Tuberculosis: A review *J. Infect. Dis Antimicrob Agents* 2010; 27:111-8
5. Delacour H., Sauvanet C., Ceppa F., Burnat P.: Analytical performances of the Diazyme ADA assay on the Cobas 6000 system. *Clinical Biochemistry* 43 (2010) 1468-1471.

