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HBS-BSA

Bovine Serum Albumin (BSA)

Intended Use:

Bovine serum albumin (BSA) is intended for use as a potentiator in antibody detection, antibody identification and compatibility test procedures. BSA can also be used as a diluent in antibody titration procedures, and to stabilize blood grouping reagents and eluates.

Summary and Explanation:

Solutions of bovine albumin were recognized as potentiators of certain antigen-antibody interactions in 1945. Since then, methods employing bovine albumin have been widely used for the detection or quantitation of antibody.

Principle of the Procedure:

Red blood cell agglutination occurs in two distinct, but concurrent stages. In the first stage, antibodies attach to their respective antigens (sensitization). Agglutination occurs during the second stage because the bound antibodies link the sensitized red blood cells together. It is thought that albumin influences the second stage of agglutination by reducing the zeta potential. This allows red cells to approach each other increasing the chances of agglutination.

Reagent Description:

This BSA is supplied as a 220g/L (22%) containing 0.1% sodium azide as a preservative.

This reagent contains bovine material obtained from a USDA approved source free of Transmissible Spongiform Encephalopathies (TSEs).

The format for the expiration date is expressed as YYYY-MM-DD (year-month-day). Lot number and expiration date information appears on the vial.

Precautions

1. The reagent contains 0.1% (w/v) sodium azide which is below the national and international regulatory thresholds and when used under a normal condition is not chemically hazardous. If this reagent is discarded in the sink, flush with large volumes of water to prevent the buildup of azide.
2. This product should be clear. Turbidity may indicate bacterial contamination. Do not use it if turbid. The reagent should not be used if a precipitate, fibrin gel or particles are present.
3. The reagent is for professional *in vitro* diagnostic use only.
4. The packaging of this product contains dry natural rubber.

Storage

BSA should be stored at 2-8°C. Do not freeze or expose it to elevated temperatures

Procedures:

Materials Provided

Hemo bioscience Bovine Serum albumin 22%

Material Required But Not Provided

BSA has various applications in blood group serology. All required materials may not be listed.

Test tubes (10 x 75 mm or 12 x 75 mm)

Transfer pipettes

Isotonic saline or phosphate-buffered saline

Anti-Human Globulin containing IgG

Antiglobulin control cells (cells sensitized with IgG)

37°C water bath or dry incubator

Centrifuge (1000 rcf)

Recommended Technique:

BSA has various applications in blood group serology. Users are advised to carefully confirm reagent suitability before use in specific procedures.

Quality Control

To control the use of this product as a potentiator, a known weakly reacting IgG antibody may be tested at regular intervals.

Limitations:

1. BSA will not produce agglutination of red blood cells by all IgG blood group antibodies.
2. Contaminated specimens and/or reagents may interfere with test results.
3. BSA should not be used in combination with other potentiators, such as low ionic strength solutions.

Specific Performance Characteristics:

Each lot of HBS- BSA is tested to assure appropriate reactivity . For Technical support, contact Hemo bioscience at 1-866-332-2835.

Bibliography:

1. Fung. M.K. ed. : Technical Manual, 18th ed. AABB, Bethesda, MD, 2014.

Glossary of Symbols:

Symbol	Definition
	Batch code
	Manufacturer
	Temperature limitation
	Consult instructions for use.
	Use by YYYY-MM-DD
	For <i>in vitro</i> diagnostic use
	Caution, consult documents.