

# Adult Bovine Serum

Origin: Australia

Product Code: RM9981

## Product Description:

Adult bovine serum (ABS) is collected from adult cows brought to slaughter. The serum is separated from the blood of adult cows more than 12 months old by mechanical defibrination process. It contains more immunoglobulins than FBS and has double the protein content than FBS. ABS has low hemoglobin content. ABS is commonly used to supplement basal cell culture media to boost the growth and proliferation of multiple cell types. ABS is not recommended for hybridomas, embryonic stem cells and other fastidious cell types.

## Applications:

- Cost effective alternative to FBS
- As a control standard, dilution matrix and calibrating agent in immunoassays (ELISA) and *in vitro* diagnostic applications
- Useful in animal vaccine production and human health care industry

## Directions for Thawing of Serum:

Thawing of the sera should be done as quickly as possible in order to minimize the period of time during which elevated salt concentration prevail in the thawed liquid.

1. Remove the bottles from the freezer and allow them to acclimatize at room temperature for 10 minutes and keep in 2-8°C overnight in refrigerator.

*Note: Do not place the serum in the water bath or incubator. Avoid exposing serum to elevated temperatures as this can lead to degradation of heat labile nutrients.*

2. Swirl the bottle of serum frequently during thawing to disperse the released salts and proteins uniformly in the liquid.

## Note on Cryoprecipitate:

We advise our users to follow the recommended thawing procedure. Proper thawing with periodic agitation is crucial to a serum's optimum performance. If bottle of serum is not frequently swirled during thawing, the released proteins and salts tend to form crystalline or flocculent precipitates. These cryoprecipitates are not detrimental to the performance of serum but might affect serum's appearance and consistency. Slight turbidity or small amount of flocculent material is normal in most serum products and will not affect its performance in any manner. Filtering serum to remove cryoprecipitate is not recommended and could result in loss of nutrients.

## Quality Control:

### Physical and Chemical analysis:

pH	: 6.8 - 8.2
Osmolality	: 260 – 340 mOsm/KgH <sub>2</sub> O
Endotoxin	: Value EU/ml
Hemoglobin	: Value mg/dl
Identity	: Typical

### Protein:

Total protein	: 5.0 - 8.5 g/dl
Albumin	: value g/dl
α-Globulin	: value g/dl
β-Globulin	: value g/dl
γ-Globulin	: value g/dl

### Sterility Testing:

Aerobic bacteria	: Not detected
Anaerobic bacteria	: Not detected
Fungi	: Not detected
Mycoplasma	: Not detected

### Virus testing:

Bovine Virus Diarrhea Virus (BVD-V)	: Not detected
Bovine Herpes Virus 1 (BHV-1)	: Not detected
Parainfluenza Type 3 (PI-3)	: Not detected

**Antibody testing:**

BVD-1 Antibody titer : Value

BVD-2 Antibody titer : Value

**Growth promotion and cytotoxicity:**

Each lot of serum is tested for growth promotion and cytotoxicity. Growth promotion shows the ability of the serum to support the growth of a cell line using a standardized low inoculum in media with 10% serum over a period of 10 to 14 days.

**Storage and Shelf Life:**

Store at -10°C to -40°C away from bright light. Shelf life of the product is 48 months. Thawed serum can be stored at 2-8°C up to four weeks.

Multiple freeze thaw cycles should be avoided. Serum should never be stored in frost free freezers. Frost free appliance undergoes intermittent warming cycles to prevent ice deposits and this might lead to multiple thawing of serum.

To avoid multiple freeze thaw cycles or long periods of refrigeration, we recommend freezing small aliquots which can be thawed and used as required.

Use before expiry date given on the label.

**Disclaimer:**

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