

# Horse Serum

Sterile filtered

**Product Code: RM10436**

## Product Description:

RM10436 is horse serum collected from controlled donor herds. It is a cost effective alternative to fetal bovine serum and supports growth of most mammalian cells. However, its usage in insect cell culture is not common. Horse serum has twice the protein content as compared to fetal bovine serum but is low in many trace elements that are required for optimal growth. When using horse serum, supplementing the basal medium with these trace elements can optimize the growth and count of cells. Horse serum also contains certain additional growth factors than other animal sera. For certain hematopoietic cells like myeloid cells only horse serum provides the necessary growth promoting factors. Therefore horse serum is the ideal supplement in nutrient media used for *in vitro* growth of specific hematopoietic progenitors.

## Applications:

- Cost effective alternative to FBS.
- Ideal supplement in nutrient media used for *in vitro* growth of specific hematopoietic progenitor stem cells.
- Primary neuronal culture.
- Used as a supplement in growth and detection media for *Mycoplasma spp.*

## 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:

Appearance	: Turbid amber to dark red liquid.
pH	: 6.8 - 8.2
Osmolality	: 260 - 340 mOsm/Kg H <sub>2</sub> O
Endotoxin	: Value EU/ml
Hemoglobin	: < 30 mg/dl

### Protein:

Total protein	: NMT 8.0g/dl
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**Sterility Testing:**

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

**Virus testing:**

Equine Infectious : Not detected  
Anemia Antibodies

**Growth promotion:**

Growth promotion test was carried out by using specific cells and comparing its performance with control serum.

L929 : Value %  
SP2 : Value %  
HELA : Value %

**Storage and Shelf Life:**

Store at -10°C to -40°C away from bright light.

Shelf life of the product is 5 years.

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 free 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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