

Donor Horse Serum

Heat Inactivated
Sterile filtered

Product Code: RM10674

Product Description:

RM10674 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*

RM10674 is heat inactivated horse serum. Heat inactivation is done to destroy heat labile components such as complement that can lead to complement mediated cell lysis. Complement proteins, antibodies and enzymes present in the serum are inactivated by heat inactivation.

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 about 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 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	: Amber liquid
pH	: 6.80 - 8.20
Osmolality	: 260 – 340mOsm/KgH ₂ O
Endotoxin	: Value EU/ml
Hemoglobin	: < 20 mg/dl

Protein:

Total protein	: 5.0 - 8.0g/dl
Albumin	: Value g/dl
α-Globulin	: Value g/dl

β -Globulin : Value g/dl
 γ -Globulin : Value g/dl

Sterility Testing:

(By European Pharmacopoeia)

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

Antibody testing:

Equine Infectious Anemia Antibody : Not detected

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:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.