

★ Storage

Store at -20 ~ 80 °C

★ Contents

- Product Manual
- Fetal Bovine Serum, Premium , US Origin

ALL PRODUCTS SOLD BY GenDEPOT ARE INTENDED FOR RESEARCH USE ONLY UNLESS OTHERWISE INDICATED. THIS PRODUCT IS NOT INTENDED FOR DIAGNOSTIC OR DRUG PURPOSE

★ Shipping Condition

Ship with dry ice

★ Introduction

Serum is commonly used as a supplement to basal growth medium in cell culture. The most common type of serum used for cell growth is fetal bovine serum (FBS), also known as fetal calf serum (FCS). In cell culture, serum provides a wide variety of macromolecular proteins, low molecular weight nutrients, carrier proteins for water-insoluble components, and other compounds necessary for in vitro growth of cells, such as hormones and attachment factors. Serum also adds buffering capacity to the medium and binds or neutralizes toxic components. At GenDEPOT Fetal Bovine Serum is collected aseptically from the unborn fetus of Adult Bovine brought to slaughter. The serum is separated aseptically from the blood of the fetus which is allowed to spontaneously clot. The raw serum is stored frozen at -20°C or below unit processed by aseptic filtration. 100% of the serum is collected from USDA licensed abattoirs located within the US. The animals are inspected by a licensed veterinarian pre and post slaughter and are certified free of diseases of clawed animals. The sera is kept under quarantine in a USDA approved facility until tested and released for sale by USDA. Material is processed in an FDA registered facility under cGMP.

★ Thaw FBS

Frozen serum should be thawed rapidly to avoid prolonged exposure of serum nutrients to high salt concentrations during the thaw period. Remove the serum from frozen storage and thaw in a water bath with temperature ranging from 26°C to 30°C. Periodically agitate the bottle during the thawing process to resuspend the viscous solutes and to avoid the formation of salt, protein, and lipid gradients that can lead to excessive precipitation. Promptly remove the serum from the water bath as soon as the serum is completely thawed. Thoroughly mix the thawed serum before it is added to a culture medium or heat inactivated as serum components such as proteins and salts tend to concentrate at the bottom of the container during thawing. Thawing of serum at temperature above 37°C is not recommended. This process may degrade heat labile nutrients, thus compromising the integrity and performance of the product, and can cause increased precipitate formation.

Once serum is thawed, it should be used promptly or divided into single-use aliquots and refrozen. Alternatively, unused portions of thawed serum may be stored at refrigerated temperatures (2 to 8°C) for a short period of time. However, the length of time that serum can be stored refrigerated with acceptable cell culture results with different cell lines.

Avoid thaw-freeze cycles or long periods of refrigeration as this can result in a decrease of stability and performance of the serum.

★ Heat Inactivation

You can incubate the thawed product at a thermostatically controlled temperature of 56°C for 30 minutes. Serum can be heat-inactivated in both our plastic and glass bottles.

Note: Do not attempt to heat-inactivate at a higher temperature for prolonged periods as this may compromise the product's performance through protein denaturation.

★ Related GenDEPOT Products

Product Name	Cat No
DMEM, High Glucose, without Sod Bicarbonate	CM001
DMEM, High Glucose, with Sod Bicarbonate	CM002
MEM with Earle's salt	CM041
RPMI-1640 with HEPES	CM058
RPMI-1640	CM059
Trypsin-EDTA(1X)	CA014
Trypsin-EDTA(10X)	CA015
Scrapase, Non-Animal Origin Dissociation Solution(1X)	CA110
Dispase Solution, 1mg/ml	CA092
Collagenase/Hyaluronidase(10X) in DMEM	CA094
Antibiotics-Antimycotics(100X)	CA002
Penicillin-Streptomycin(100X)	CA005
Dulbecco's Phosphate-Buffered Saline(DPBS)(1X)	CA008
Cellmaxin, 10mg/ml	C3314
Cellmaxin Plus, 10.5mg/ml	C3319
Ceracryo, Xeno-Free Cell Freezing Medium	C0667
Water, 0.1um Filtered, Cell Culture Tested	W0900