Calf Bovine Serum, Iron Fortified
30-2030™

Description
Calf Bovine Serum is iron supplemented and triple filtered through 0.1 µm filters. Each lot of calf bovine serum is tested for sterility and for the ability to support the growth of cells using sequential growth curves. Calf bovine serum is manufactured from bovine blood collected in USDA-inspected abattoirs located in the United States. Serum has not come from cattle born, raised, shipped through, or slaughtered in countries where BSE is known to exist. This product has applications for cell culture, cell growth, and viability.

Origin: Calf bovine serum is manufactured from bovine blood collected in USDA-inspected abattoirs located in the United States. Blood is collected from donor animals by venipuncture between the ages of 16 and 22 weeks. Calf bovine serum is supplemented with iron to off-set the high concentrations of transferrin produced by formula-fed animals prior to collection.

Volume: 500 mL

Storage Conditions
Product format: Frozen
Storage conditions: -20°C or colder

Intended Use
This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.
Biosafety Information
ATCC determined that a biosafety level is not applicable to this material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to complete your own risk assessment and understand any potential hazards associated with the material per your organization’s policies and procedures and any other applicable regulations as enforced by your local or national agencies.

Certificate of Analysis
For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Handling Procedures

**Thawing**
Remove serum from frozen storage and place the bottle(s) overnight in a refrigerator at 2°C to 8°C. Remove the yellow plastic storage bag and transfer the bottle(s) to a 37°C water bath. Gently agitate the bottle(s) from time-to-time in order to mix the solutes that tend to concentrate at the bottom of the bottle. **Do not keep serum at 37°C any longer than necessary for it to thaw completely.**
Alternatively, serum bottles may be placed in a 37°C water bath directly from frozen storage. **Do not thaw serum at temperatures above 37°C.** Bottles should be agitated by a gentle swirling motion to enhance mixing and thawing.

If you are not using all of your thawed serum at once, it is recommended to dispense it into single-use aliquots and store these at -20°C or colder. Temporary storage of thawed serum at 2°C to 8°C may be acceptable, depending on the customer application. This should be validated by the customer prior to implementation.
Serum Precipitates
Turbidity and flocculent material may be present after thawing. ATCC’s experience indicates that neither of these changes affects the performance of serum. If the presence of flocculent material or turbidity is a concern, they can be removed by aseptic filtration through a sterile 0.45 µm filter.

Heat-Inactivation of Serum

**CAUTION:** Heat-inactivation of serum is usually unnecessary and can be detrimental to the growth of some cells. We strongly recommend that you heat-inactivate serum only if it is required for a particular cell line.

1. Thaw serum following the directions above.
2. Preheat a water bath to 56°C with sufficient water to rise above the level of the serum in the bottle.
3. Mix thawed serum by gently swirling the bottle and then place the bottle in the 56°C water bath. (The temperature of the water bath will decrease.)
4. When the temperature of the water bath reaches 56°C again, heat the serum for an additional 30 minutes. Mix gently every five minutes to insure uniform heating.
5. At the end of 30 minutes, remove serum from the water bath, cool, and store at -20°C or colder.

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Quality Control Specifications

**Bacterial and fungal testing:** Not detected

**Mycoplasma contamination:** Not detected

**Virus testing:** Not detected

**Endotoxin:** ≤ 10 EU/mL

**Growth promotion:** Pass

**Hemoglobin:** ≤ 20 mg/dL

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Material Citation
If use of this material results in a scientific publication, please cite the material in the following manner: Calf Bovine Serum, Iron Fortified (ATCC 30-2030)

References
References and other information relating to this material are available at www.atcc.org.

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Revision

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