

**R&D SYSTEMS**  
a **bio-technne** brand

# Atlanta Biologicals™ Fetal Bovine Serum

and Cell Culture Media & Reagents



**Fetal Bovine  
Serum**

*Premium Select*

Triple 0.1um filtered  
Cat. No.: S11550  
Lot No.: A27902  
Volume: 500 ml  
Exp. Date: Jan. 2032

Store at -5C to 20C  
For In Vitro Research Use Only

**ATLANTA**  
*biologicals*

4123 Industry Way • Phenoix, GA 30942  
Phone: (800) 780-7788

# Atlanta Biologicals by R&D Systems

Bio-Techne, the parent company of R&D Systems, proudly acquired Atlanta Biologicals in 2018. Atlanta Biologicals' reputation as a recognized specialist in cell culture products synergizes with Bio-Techne's mission to provide tools to assist scientists across their research workflow. Atlanta Biologicals™ Fetal Bovine Serum, animal serum, cell culture media, and supplements not only help Bio-Techne provide a more complete cell culture reagent portfolio to the research community, but also helps to maintain the high-quality reputation associated with R&D Systems and all of the Bio-Techne brands.

The quality of the Atlanta Biologicals portfolio is built on over 40 years of research and development. From the beginning, high standards for manufacturing and quality assurance was the focus for developing superior cell culture products. An ongoing commitment to continuous quality improvements has been the key to establishing Atlanta Biologicals sera and media as premier products for cell culture.

Atlanta Biologicals has developed efficient processing guidelines for each product manufactured that guarantee unsurpassed quality and consistency from lot-to-lot. Our qualification programs for raw and ancillary materials assure that our rigorous requirements regarding material selection, traceability, characterization, and suitability for use are met. Additionally, each individual lot of product manufactured is subjected to an extensive series of robust quality control testing procedures by our QA/QC department and must comply with our stringent specifications and acceptance criteria before release for distribution. This strict control over the manufacturing processes results in the highest level of product quality and performance.

Atlanta Biologicals cell culture portfolio offers an unparalleled commitment to high-quality products, exceptional product value, and excellent customer service to research laboratories and biotechnology-based industries, both large and small. When choosing Atlanta Biologicals serum, media, and reagents, scientists are choosing to use the highest quality products available.



**ATLANTA biologicals™**  
by **R&D SYSTEMS**

- Classic Fetal Bovine Serum
- Specialty Fetal Bovine Serum
- Animal Serum
- Cell Culture Medium
- Reagents
- Supplements

To Purchase: Atlanta Biologicals  
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TEL +1 800 780 7788  
[service@atlantabio.com](mailto:service@atlantabio.com)

# Fetal Bovine Serum

Atlanta Biologicals™ Fetal Bovine Serum (FBS) meets the high-quality manufacturing standards that are affiliated with R&D Systems and are expected by our customers. Over 40 years of rigorous research, development, and manufacturing has resulted in a wide portfolio of FBS that ranges from classic cell culture grade to specialty formulations.

## Premium Manufacturing Processes and Quality Assurance

FBS is the ideal growth supplement for cell culture media and is generally preferred over other types of sera. Its high levels of nutrients and optimal combination of growth factors makes FBS the most effective growth promoter for virtually any cell culture system.

In addition, the significantly lower content of antibodies compared to adult and newborn sera minimizes the risk of antibody cross reaction with cells in culture.

Recognizing the vital importance of FBS for cell culture health, Atlanta Biologicals FBS is produced under uncompromising manufacturing processes and quality assurance procedures, from collection of the raw material to manufacture of the final product, ensuring reliable and consistent delivery of the highest quality FBS to the scientific community.

## Collection and Processing Specifications

- FBS is quality controlled from blood collection through bottling
- Ensures transparency and traceability of FBS production
- Maintains excellent cell growth-promoting properties of FBS
- Controls lot-to-lot consistency

## Origin and Traceability and Documentation

- FBS is collected in USDA-approved countries
- Documented by the USDA as exotic disease-free
- Each lot is traceable back to collection site
- Globally sourced: United States, Central America, Mexico, Canada, Australia, and New Zealand

## Serum Testing and Matching Programs

- Serum testing is crucial for researchers
- Serum Testing Program enables the free screening of serum lots in your specific application
- Specified quantities of FBS lots will be held during sample evaluation, typically up to 4 weeks
- Lot Matching Program assists in selecting serum based on the researcher's serum specifications and performance criteria

## Filtration and Quality Assurance Specifications

- Raw Fetal Bovine Serum released for manufacture is processed according to validated and approved cGMP and ISO 9001 guidelines
- 0.1 µm pore size rated filters as final filters in order to effectively remove bacteria, fungi, and mycoplasma
- FBS is processed in positive pressure, HEPA-filtered clean rooms
- Rigorous quality control testing is performed on each lot before release, including: cell culture performance, sterility and mycoplasma testing, viral analysis, and physical and biochemical assays



# Classic Fetal Bovine Serum

## Premium Grade

- High-quality FBS widely used among cell culture researchers
- More affordable alternative to other commercially available FBS
- Superior performance with a broad spectrum of cell types
- Manufactured from USDA-approved origin material

## Optima Grade

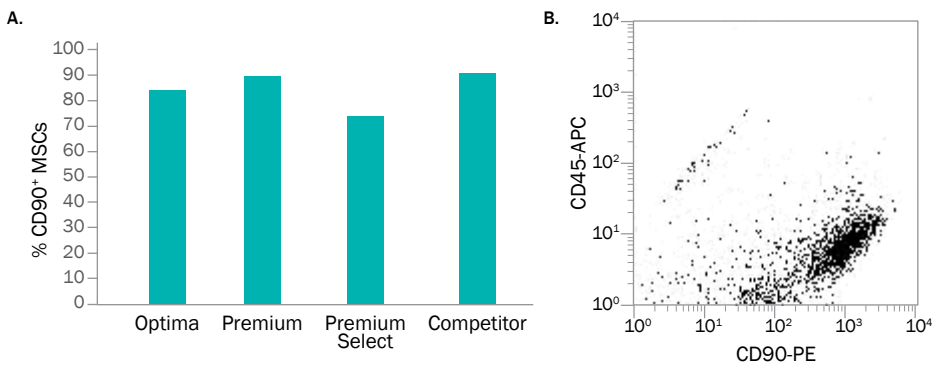
- For general cell culture applications
- Extensively profiled and virus-tested
- Manufactured exclusively from US origin material

## Premium Select Grade

- Highest-grade Atlanta Biologicals FBS
- For culturing demanding and sensitive cell lines
- Undergoes extensive hormone and biochemical profiling
- Virus-tested using an extended virus panel
- Manufactured from US- or USDA-approved origin



Product	Size	Catalog #	
		Regular	Heat-inactivated
Fetal Bovine Serum - Premium	500 mL	S11150	S11150H
	100 mL	S11110	S11110H
	50 mL	S11195	S11195H
Fetal Bovine Serum - Optima	500 mL	S12450	S12450H
	100 mL	S12410	S12410H
	50 mL	S12495	S12495H
Fetal Bovine Serum - Premium Select	500 mL	S11550	S11550H
	100 mL	S11510	S11510H
	50 mL	S11595	S11595H



**Growth of MSCs using Atlanta Biologicals Fetal Bovine Serum (FBS).** Human mesenchymal stem cells were cultured for 4 passages in media supplemented with Atlanta Biologicals Optima, Premium, Premium Select FBS or another commercially available FBS (Competitor). MSCs were analyzed by flow cytometry using PE-conjugated CD90 and APC-conjugated CD45. (A) Percentage of CD90<sup>+</sup> MSCs following four passages in culture. (B) Representative flow cytometry data of CD90<sup>+</sup> human MSCs cultured for 4 passages in Atlanta Biologicals Premium Grade FBS.

# Specialty Fetal Bovine Serum

## Embryonic Stem Cell Qualified

- Uses the highest-quality FBS
- Outstanding performance with embryonic stem cells
- Screened for plating efficiency, colony morphology, and cytotoxicity
- Eliminates pre-screening of multiple serum lots

## Hybridoma Qualified

- Suited for culturing hybridoma and myeloma cells
- Screened for superior hybridoma growth at limiting dilutions
- Minimizes cytotoxicity during the growth studies

## TET Tested

- Specifically designed for use in TET systems and cell lines
- Exhibits undetectable levels of tetracycline and tetracycline-derivatives



## Charcoal/Dextran Treated

- Ideal for applications requiring lower levels of hormones, steroids, or growth factors
- Each lot is tested for hormones and steroids before and after treatment

## Dialyzed 12–14 kDa

- Ideal for cell culture systems that require reduced concentrations of low molecular weight components
- Dialyzed against physiological saline using a 12–14 kiloDalton (kDa) membrane
- Glucose concentration is precisely monitored throughout the procedure
- Manufacturing process minimizes precipitation and inactivation of serum peptides

Product	Size	Catalog #	
		Regular	Heat-inactivated
Embryonic Stem Cell Qualified	500 mL	S10250	S10250H
	100 mL	S10210	S10210H
	50 mL	S10295	S10295H
Hybridoma Qualified	500 mL	S10650	S10650H
	100 mL	S10610	S10610H
	50 mL	S10695	S10695H
TET Tested	500 mL	S10350	S10350H
	100 mL	S10310	S10310H
	50 mL	S10395	S10395H
Charcoal/Dextran Treated	500 mL	S11650	S11650H
	100 mL	S11610	S11610H
	50 mL	S11695	S11695H
Dialyzed 12–14 kDa	500 mL	S12850	S12850H
	100 mL	S12810	S12810H
	50 mL	S12895	S12895H

# Animal and Human Sera

Atlanta Biologicals manufactures and supplies a wide range of animal and human cell culture sera to meet the requirements of even the most demanding cell types. While Fetal Bovine Serum is our specialty, we apply the same high-quality manufacturing standards to all of our sera.

## Other Bovine Serum

Product	Size	Catalog #	
		Regular	Heat-inactivated
Donor Bovine Serum	500 mL	S11350	S11350H
	100 mL	S11310	S11310H
	50 mL	S11395	S11395H
Calf Serum	500 mL	S11450	S11450H
	100 mL	S11410	S11410H
	50 mL	S11495	S11495H
Iron-Supplemented Calf Serum	500 mL	S11250	S11250H
	100 mL	S11210	S11210H
	50 mL	S11295	S11295H
Newborn Calf Serum	500 mL	S11950	S11950H
	100 mL	S11910	S11910H
	50 mL	S11995	S11995H



## Horse Serum

Product	Size	Catalog #	
		Regular	Heat-inactivated
Donor Horse Serum	500 mL	S12150	S12150H
	100 mL	S12110	S12110H
	50 mL	S12195	S12195H



## Small Animal Serum

Product	Size	Catalog #	
		Regular	Heat-inactivated
Donor Goat Serum	500 mL	S13150	S13150H
	100 mL	S13110	S13110H
	50 mL	S13195	S13195H
Rabbit Serum	100 mL	S15110	S15110H
Rat Serum	100 mL	S17110	S17110H
	25 mL	S17193	S17193H
Mouse Serum	100 mL	S18110	S18110H
	25 mL	S18193	S18193H



# Classical Cell Culture Media

Cultured cells require a source of nutrition, typically provided by classical cell culture media. These media are mostly used with a serum supplement. A variety of chemically defined media formulations are in existence. Atlanta Biologicals supplies the most common classical media as well as a selection of popular variations to their basic formulations.



- DMEM
- RPMI
- MEM
- DMEM/F-12
- F-12
- L-15
- Custom Cell Culture Media Manufacturing

## Reagents and Supplements

Many other reagents and supplements are used in a variety of cell culture applications. Atlanta Biologicals supplies laboratories with high-quality Balanced Salt Solutions, Cryopreservation Media, Cell Separation Media, Media Supplements, Biological Buffers, and Cell Dissociation Reagents.

### Balanced Salt Solutions

- DPBS
- EPBS
- HBSS



### Reagents & Supplements

- Antibiotics & Antimycotics
- MEM Supplements
- L-Glutamine
- Buffers
- Cell Dissociation Reagents
- Cell Freezing Media



### Cell Separation

- Fico/Lite-LymphoH
- Fico/Lite-LM (Mouse)
- Custom Cell Separation Media





## Free Serum Lot Testing!

- Available for all Atlanta Biologicals FBS and Serum!
- Specified quantities of lots will be held during evaluation
- Approximately a 4-week lot hold time

While **Atlanta Biologicals FBS** and **Serum** are controlled for lot-to-lot variability, cells can be sensitive to even the slightest variation. Testing a serum lot on specific applications and cell types is crucial for many researchers.

**R&D SYSTEMS**

**NOVUS**  
BIOLOGICALS

**TOCRIS**

protein**simple**

**ACD**<sup>™</sup>

**bio-techne**<sup>®</sup>

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