

## **ZETA life Premium Fetal Bovine Serum (Z7202FBS)**

**Product Codes:** Z7202FBS-100 (100ml), Z7202FBS-500 (500ml)

## **Superior Quality: The Foundation of Reliable Cell Culture**

In life science research, successful cell culture is paramount to scientific outcomes, and the quality of Fetal Bovine Serum (FBS) is a critical factor. ZETA life Premium Fetal Bovine Serum (Z7202FBS), sourced from premium South American origins and manufactured under stringent standards, offers exceptional performance across diverse cell types, making it the trusted choice for advancing research.

### **1. Premium South American Sourcing: The Cornerstone of Quality**

- **Origin in the Golden Livestock Belt:** Z7202FBS originates from the renowned South American "Golden Livestock Belt," characterized by vast grasslands and pristine ecosystems. Farms adhere to strict international standards for animal welfare and husbandry, ensuring cattle are raised in antibiotic-free, contaminant-free environments. Blood is collected at the optimal fetal developmental stage, yielding serum rich in high-activity growth factors (e.g., FGF, PDGF) and essential nutrients, creating a potent

For scientific research use only, not to be used for any other purposes.

natural "nutritional reservoir" for cell culture. Every drop embodies the purity and vitality of its source.

- **Rigorous Production for Excellence:**

- **Aseptic Collection, Preserving Activity:** Blood is collected via GMP-compliant sterile cardiac puncture in a fully enclosed, ultra-clean environment. This minimizes microbial contamination risk and maximally preserves critical bioactive components vital for cell growth.
- **Triple 0.1µm Filtration for Ultimate Purity:** Advanced triple 0.1µm microfiltration removes bacteria, fungi, mycoplasma, and particulate impurities, achieving exceptional sterility. Process optimization ensures the integrity and biological functionality of essential nutrients and growth factors are maintained.
- **50+ Critical Tests for Guaranteed Quality:** Every batch undergoes rigorous testing for over 50 parameters, including endotoxin levels, hemoglobin concentration, pH, and osmolality. Endotoxin levels are maintained significantly below industry standards, minimizing cytotoxic effects. Only batches meeting all stringent specifications receive the ZETA LIFE certification.

## 2. Unmatched Versatility Across Cell Culture Applications

- **Optimal for Stem Cell Culture:**

For scientific research use only, not to be used for any other purposes.

- **Mesenchymal Stem Cells (MSCs):** Z7202FBS  
significantly enhances proliferation of Bone Marrow MSCs (BMSCs) and maintains their multipotency. It boosts osteogenic differentiation efficiency (validated in peer-reviewed literature). Adipose-derived MSCs (ADMSCs) thrive, preserving biological characteristics for research in fat tissue repair and regeneration.
- **Reproductive Stem Cells:** Supports normal proliferation and differentiation of Spermatogonial Stem Cells (SSCs). Effectively maintains the undifferentiated state, clonal stability, and pluripotency marker expression in Human Embryonic Stem Cells (e.g., H9 line).
- **Cancer Stem Cells (CSCs):** Enables Prostate CSCs (PCSCs) to retain stemness, providing reliable models for tumor biology and drug discovery. PCSCs cultured with Z7202FBS show stable, reproducible responses in drug sensitivity assays.
- **The Solution for Primary Cell Culture:**
  - **Animal Primary Cells:** Promotes rapid attachment and sustained morphology/functionality in primary rat hepatocytes (liver metabolism/toxicity studies). Supports normal growth and metabolic function in primary adipocytes (obesity/diabetes research). Maintains

extracellular matrix secretion in primary chondrocytes  
(cartilage repair/arthritis studies).

- **Human Primary Cells:** Ensures stable proliferation and physiological relevance in Human Mesangial Cells (HMCs) for kidney disease research. Supports normal growth and tight junction formation in primary mouse lung microvascular endothelial cells for pulmonary vascular studies.
- **Special Species:** Enables high viability and robust growth in primary Large Yellow Croaker (LYC) ovarian and testicular cells, crucial for aquaculture genetics and breeding research.
- **Reliable Performance with Common Cell Lines:**
  - **Cancer Cell Lines:** Delivers strong proliferation and typical morphology in A549 (lung cancer), HepG2 (liver cancer), and key colorectal lines (SW620, SW480, HCT116, HT-29), enabling stable invasion/migration studies. Ensures responsive MDA-MB-231 cells for breast cancer therapy research.
  - **Immune Cell Lines:** Maintains normal immune activity in RAW264.7 macrophages (inflammation/immunology). Supports differentiation and functional studies in THP-1 monocytes (hematological disease research).
  - **Other Common Lines:** Provides reproducible results in HUVEC angiogenesis assays. Ensures excellent growth and passage for Vero,

HeLa, 293T, HEK293T cells. Maintains stable growth in

NIH-3T3 fibroblasts, ideal as feeder layers.

### **3. ZETA LIFE: Three Decades of Expertise and Trust**

- **Over 30 Years of Specialization:** Since 1989, ZETA LIFE has been a leader in FBS, serum-free media (SFM), and mammalian cell SFM development. As a key contributor to the international DMEM/F12 standard, we possess deep insight into cell culture needs, driving continuous product innovation.
- **End-to-End Quality Control:** Full traceability from source to final product, including origin documentation, veterinary certificates, and detailed QC reports. Automated production within ISO Class 5 (100) cleanrooms ensures batch-to-batch consistency and stability, guaranteeing experimental reproducibility.
- **Driving Innovation:** Committed to advancing life sciences. Our collaboration with UCSF led to the development of Advanced DNA RNA 3rd Gen Peptide Transfection Reagent, a key technology for protein studies and cell therapy R&D. This spirit of innovation infuses our FBS products and underscores our dedication to supporting research.

### **4. Dedicated Support System: Partnership for Success**

- **Comprehensive Agent Support:**

For scientific research use only, not to be used for any other purposes.

- **Marketing Resources:** Extensive toolkit including detailed brochures, technical posters, in-depth whitepapers, and practical video tutorials. Regular training sessions enhance market penetration and sales expertise.
- **Reliable Supply Chain:** Robust production and logistics ensure consistent product availability. Flexible ordering policies cater to diverse agent needs.
- **Protected Territories:** Exclusive regional distribution rights with active market protection policies ensure fair competition and safeguard agent profitability.
- **Researcher-Centric Services:**
  - **Expert Technical Support:** Access guidance on serum usage, culture optimization, and troubleshooting from our experienced scientific team. Receive customized technical advice tailored to your specific research goals.
  - **Free Sample Trials:** Test Z7202FBS in your own lab. Our team provides application support and helps analyze results to confirm suitability.
  - **Custom Protocol Development:** Get tailored cell culture protocols (e.g., serum concentration, media formulation, environmental parameters) designed to maximize your experimental success.

**Choose ZETA life Premium Fetal Bovine Serum**

**(Z7202FBS-100/500) – your partner for high-quality, reliable cell culture.**

**Empowering agents in market growth and researchers in unlocking life's  
mysteries, ZETA LIFE is committed to advancing scientific discovery  
together.**