

## **ZETA LIFE Australian Origin Fetal Bovine Serum (Z7010FBS) -**

### **Product Overview**

#### **1. Core Product Specifications**

- **Brand:**ZETA LIFE
- **Product Name:**Fetal Bovine Serum, Australia Origin
- **Catalog Number:** Z7010FBS-500
- **Size:**500 mL
- **Storage:**-20°C
- **Certifications & Compliance:**
  - USDA Certified
  - Triple sterile filtration (0.1 µm)
  - Complete documentation: Country of Origin Statement, Veterinary Health Certificate, Certificate of Analysis (COA)
  - Manufactured under GMP standards
- **Key Quality Specifications:**
  - Endotoxin levels < 0.1 EU/mL
  - Hemoglobin Test: Passed
  - No observed hemolysis or particulates
  - Appearance: Light yellow, clear, slightly viscous liquid

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

## **2. Compatible Cell Types**

- **(1) Stem Cell Culture:**

- Mesenchymal Stem Cells (MSCs): Bone Marrow MSCs (BMSCs), Adipose-derived MSCs (ADMSCs)
- Embryonic Stem Cells (ESCs): Human Embryonic Stem Cells (H9)
- Germline Stem Cells: Spermatogonial Stem Cells (SSCs)
- Cancer Stem Cells (CSCs): Prostate Cancer Stem Cells (PCSCs)

- **(2) Primary Cell Culture:**

- **Animal Tissue Primary Cells:**

- Rat: Primary Rat Hepatocytes, Primary Mouse Lung Microvascular Endothelial Cells
- Human: Primary Human Mesangial Cells (HMCs), Normal Human Hepatocytes (LO2)
- Fish: Primary Large Yellow Croaker Ovarian Cells (LYCO), Primary Large Yellow Croaker Testicular Cells (LYC)
- Other: Primary Adipocytes, Primary Chondrocytes

- **(3) Cell Lines & Tumor Cell Culture:**

- **Epithelial/Endothelial Cells:**

- Human Umbilical Vein Endothelial Cells (HUVECs), Human Lung Cancer Cells (A549), Human Hepatocellular Carcinoma Cells (HepG2, HCC, HL-7721)
- Cervical Cancer Cells (HeLa), Colon Cancer Cells (SW620, SW480, HCT116, HT-29)

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

- **Immune/Neural Cells:**

- Mouse Monocyte/Macrophage Cells (RAW 264.7), Human Neuroblastoma Cells (SH-SY5Y), Rat Adrenal Medulla Pheochromocytoma Cells (PC-12)

- **Other Cell Types:**

- Mouse Embryonic Fibroblasts (NIH-3T3), Human Breast Cancer Cells (MDA-MB-231, MCF-7)
- Human Gastric Cancer Cells (MGC-803, HGC-27), Human Nasopharyngeal Carcinoma Cells (NPC, HNE1, HNE2, HONE1)

### 3. Key Features & Advantages

- **(1) Certification & Quality Assurance:**

- **Global Compliance:** Validated by US Secretary of State business license, USPTO trademark registration, TUV-certified (ISO 9001:2008), and approved by Chinese Entry-Exit Inspection & Quarantine.
- **Full Traceability:** Each batch is traceable to its source Australian ranches, guaranteeing TSE/BSE-free status.
- **Rigorous Quality Control:** Manufactured in ISO Class 5 (100) cleanrooms; triple 0.1 µm sterile filtration.
- **Superior Endotoxin Levels:** < 0.1 EU/mL, exceeding industry standards.
- **Comprehensive COA:** Over 50 tested parameters including viruses, microbes, and hemoglobin, ensuring experimental reproducibility.

- **(2) Technical & Performance Benefits:**

- **Broad Cell Compatibility:** Supports efficient culture of >99% of tumor cell lines, stem cells (e.g., H9, BMSCs), primary cells (e.g., hepatocytes, fish cells), and neural/immune cells. Cited in thousands of peer-reviewed publications. Ideal for advanced biomedical research (stem cell therapy, tumor cell functional studies).
- **Enhanced Cell Viability:** Ultra-low endotoxin minimizes cell stress. Promotes attachment and passage of sensitive primary cells (e.g., SSCs, fish primary cells) and difficult-to-culture lines. Reduces serum-related artifacts (aberrant morphology, slow proliferation).

- **(3) Supply Chain & Support:**

- **Consistent Sourcing:** Directly supplied from three premier Australian ranches (Barbersfield Station, La Sancta Lucia, Bushilton Royal Ranch), minimizing lot-to-lot variation and ensuring consistent supply & quality.
- **Expert Technical Support:** Dedicated guidance for distributors and researchers: troubleshooting common cell culture issues (e.g., particulate contamination, extended passage times) and serum selection advice tailored to specific research needs (e.g., Australian origin for stem cells, South American origin for standard cell lines).

- **(4) Market Differentiation:**

- **Competitive Value:** Priced 20-30% lower than comparable Australian-origin FBS brands, with reliable availability.

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

- **Premium Tier Offering:** Uniquely combines full traceability with ultra-low endotoxin levels, addressing the demand for high-quality, cost-effective solutions in mid-to-high-end research markets.

#### **4. Value Proposition**

- **For Distributors:**

- Streamlined Import Compliance: Provided US and Chinese regulatory documentation minimizes import risks.
- Strategic Product Portfolio: Differentiated sourcing (Australian/South American) covers key market segments (400–900 range).
- Marketing & Training Support: Academic promotion materials and technical training resources available.

- **For Researchers:**

- **Data Integrity Assurance:**Guaranteed serum quality from source ensures experimental reliability.
- **Cost Reduction:**Minimizes experimental repeats caused by serum contamination or nutrient deficiencies.
- **Critical Application Focus:** Specifically recommended for demanding applications like stem cell and primary cell culture, where serum quality is paramount.