



CERTIFICATE OF ANALYSIS

GemCell™ ANZ Origin Fetal Bovine Serum

(Catalog Number 100-700-500, 100-700-050)

Lot Number: A325021

Date of Manufacture: Nov2024

Product Expiry: Nov2029

Origin: Australia

Storage Temperature: ≤ -10°C

For cell culture, further manufacturing or research use only. Not for direct therapeutic use.

Product Description: GemCell™ ANZ Origin Fetal Bovine Serum is sterile-filtered through a 0.1 µm filter prior to freezing.

| Test | Methodology | Specification | Analysis |
|------------------------------------|---|-------------------|--------------|
| Biological Testing | | | |
| Endotoxin | USP <85> & EP 2.6.14 | <10.0 EU/mL | <0.005 EU/mL |
| Hemoglobin | USP <90> | <20.0 mg/dL | 7.18 mg/dL |
| Microbiological Testing | | | |
| Sterility | USP <71> & EP 2.6.1 | | |
| Bacteria | | No Growth | No Growth |
| Fungi | | No Growth | No Growth |
| Mycoplasma | Barile and Kern & Hoechst Fluorochrome Stain | Not Detected | Not Detected |
| Viral Testing | | | |
| | 9CFR 113.53c [113.46, 113.47] | | |
| Cytopathic Agents | | Not Detected | Not Detected |
| Hemadsorbing Agents | | Not Detected | Not Detected |
| Extraneous Viruses (FAb) | | | |
| Bluetongue Virus | | Not Detected | Not Detected |
| Bovine Adenovirus | | Not Detected | Not Detected |
| Bovine Parvovirus | | Not Detected | Not Detected |
| Bovine Viral Diarrhea (Cytopathic) | | Not Detected | Not Detected |
| Bovine Respiratory Syncytial Virus | | Not Detected | Not Detected |
| Rabies Virus | | Not Detected | Not Detected |
| Reovirus | | Not Detected | Not Detected |
| Physical Testing | | | |
| Electrophoretic Pattern | Cellulose Acetate Electrophoresis | Normal | Normal |
| Osmolality | USP <785> & EP 2.2.35 | 260 – 350 mOsm/kg | 320 mOsm/kg |
| pH | USP <791> EP 2.2.3 | 6.5 – 8.5 | 7.19 |
| Biochemistry Testing | | | |
| Albumin | | Test and Report | 2.1 g/dL |
| Alkaline Phosphatase | | Test and Report | 190 IU/L |
| ALT (SGPT) | | Test and Report | 5 IU/L |
| AST (SGOT) | | Test and Report | 26 IU/L |



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|------------------|------------------------|-----------------|--------------|
| GGT | Chemistry Analyzer | <10 U/L | 5 IU/L |
| Bilirubin, Total | | Test and Report | 0.2 mg/dL |
| BUN | | Test and Report | 17 mg/dL |
| Calcium | | Test and Report | 13.2 mg/dL |
| Chloride | | Test and Report | 98 mmol/L |
| Cholesterol | | Test and Report | 30 mg/dL |
| Cortisol | | Test and Report | 0.280 µg/dL |
| Creatinine | | Test and Report | 2.7 mg/dL |
| Glucose | | Test and Report | 90 mg/dL |
| IgG | ELISA | <0.300 mg/mL* | 0.1069 mg/mL |
| Insulin | | Test and Report | 7.62 µU/mL |
| Iron, Serum | | Test and Report | 195 µg/dL |
| Phosphorus | | Test and Report | 10.0 mg/dL |
| Potassium | | Test and Report | 10.1 mmol/L |
| Progesterone | | Test and Report | <0.1 ng/mL |
| Protein, Total | USP <1057> & EP 2.5.33 | 2.5 – 6.0 g/dL | 3.6 g/dL |
| Sodium | | Test and Report | 139 mmol/L |
| Testosterone | | Test and Report | 0.02 ng/mL |
| T3 | | Test and Report | 112.0 ng/dL |
| T4 | | Test and Report | 17.6 µg/dL |
| Triglycerides | | Test and Report | 58 mg/dL |
| Uric Acid | | Test and Report | 2.3 mg/dL |

Our fetal bovine serum meets all USDA requirements and has passed ante and post-mortem. It is collected in countries recognized as being free of foot-and-mouth disease and rinderpest. The origin of all fetal bovine serum is traceable by lot number, date, and country of collection. Precipitates may develop in this product upon freezing and/or thawing; this occurrence does not impact culture performance. *Some geographic regions may test higher than 0.300 mg/mL. If this be the case, refer to GGT results less than 10 U/L to ensure FBS purity.

The testing that has been performed as part of this lot release has been reviewed by Quality Assurance personnel and has confirmed that the testing meets the specifications presented on this Certificate of Analysis.

Alejandra Peña
Name

31 DEC 2025
Date

QA Associate II
Title