

**Product:** **GemCell™ U.S. Origin SuperCalf Serum**  
 < 18 months of age  
 0.2µm sterile-filtered

**Catalog #: 100-510**

**Lot #: C92G00H**

**Origin: United States (100%)**

**Manufacture Date: Oct 2016**

**Expiration Date: Oct 2021**

| <i>TEST</i>                            | <i>METHODOLOGY</i>            | <i>SPECIFICATION</i> | <i>RESULTS</i> |
|--|-------------------------------|----------------------|----------------|
| <b>Biological Testing</b>              |                               |                      |                |
| Endotoxin                              | USP <85>                      | Report               | <2.5 EU/mL     |
| <b>Microbiological Testing</b>         |                               |                      |                |
| Sterility                              | 9 CFR 113.26                  |                      |                |
| Bacteria                               |                               | Not Detected         | Not Detected   |
| Fungi                                  |                               | Not Detected         | Not Detected   |
| Mycoplasma                             | Barile, MF and Kern, J (1971) | Not Detected         | Not Detected   |
| <b>Viral Testing</b>                   |                               |                      |                |
|  | Modified 9 CFR 113.53c        |                      |                |
| Cytopathic Agents                      |                               | Not Detected         | Not Detected   |
| Hemadsorbing Agents                    |                               | Not Detected         | Not Detected   |
| Extraneous Viruses (FAb)               |                               |                      |                |
| Bovine Viral Diarrhea (non-cytopathic) |                               | Not Detected         | Not Detected   |
| Bluetongue Virus                       |                               | Not Detected         | Not Detected   |
| <b>Physical Testing</b>                |                               |                      |                |
| Osmolality                             | USP<785>                      | Report               | 312 mOsm/kg    |
| pH @ RT                                | USP<791>                      | Report               | 7.22           |



# Biochemical Testing

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| TEST                 | METHODOLOGY                      | SPECIFICATION | RESULTS     |
|----------------------|----------------------------------|---------------|-------------|
| Albumin              |                                  |               | 3.6 g/dL    |
| Alkaline Phosphatase |                                  |               | 179.0 U/L   |
| ALT (SGPT)           |                                  |               | 13.0 U/L    |
| AST (SGOT)           |                                  |               | 74.0 U/L    |
| Bilirubin, Total     |                                  |               | 0.3 mg/dL   |
| BUN                  |                                  |               | 7.0 mg/dL   |
| Calcium              |                                  |               | 2.65 mM     |
| Chloride             |                                  |               | 100.0 mM    |
| Cholesterol          |                                  |               | 142.0 mg/dL |
| Creatinine           |                                  |               | 0.8 mg/dL   |
| Glucose              |                                  |               | 2.72 mM     |
| Hemoglobin           | Fleming, AF and Woolf, AJ (1965) | Report        | 13.16 mg/dL |
| Iron, Serum          |                                  |               | 407 µg/dL   |
| Phosphorus           |                                  |               | 2.94 mM     |
| Potassium            |                                  |               | 6.2 mM      |
| Protein, Total       | Biuret                           | Report        | 6.7 g/dL    |
| Sodium               |                                  |               | 142.0 mM    |
| Triglycerides        |                                  |               | 22.0 mg/dL  |
| Uric Acid            |                                  |               | 1.1 mg/dL   |

*Results shown were obtained by carefully performed methods believed to be reliable. However, since some results may vary by methodology, it is suggested that tests for which results are particularly critical be repeated by the end user. Our bovine serum meets all USDA requirements and has passed ante- and post-mortem inspection by a licensed veterinarian. It is collected in countries recognized as being free of foot-and-mouth disease and rinderpest. The origin of all 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.*

  
 Quality Assurance