# Certificate of Analysis



# **Tet System Approved FBS**

Catalog No.AmountLot Number63110750 ml (sample)A20076

# **Description**

Fetal Bovine Serum (FBS) that has been functionally tested for optimal use with all of our Tet Systems. This FBS does not contain trace levels of tetracycline (or its derivatives) which have been observed to interfere with proper regulation of TRE-controlled gene expression. Use of this serum ensures the maximal range of induction possible with the Tet Systems.

### **Storage Conditions**

Store at −20°C.

### **Shelf Life**

• 1 year from date of receipt under proper storage conditions.

### **Shipping Conditions**

• Dry ice  $(-70^{\circ}\text{C})$ 

## **Quality Control Data**

### **Functional Testing:**

Tet System Approved Fetal Bovine Serum has been tested at Takara Bio USA, Inc. with the CHOAA8-Luc Tet-Off® cell line which is sensitive to nanogram concentrations of tetracyclines. The full range of induction possible with the Tet system was observed.

### **Manufacturer Testing:**

The raw fetal bovine serum used in the manufacture of this material was collected and processed from abattoirs located in Mexico. The maternal animals from which the fetal blood was derived received ante- and post- mortem inspections at the time of slaughter under the supervision of a licensed veterinarian and appeared free of infectious and contagious diseases and parasites. This material has been tested via 9CFR113.53 for Adventitious Viral Agents. The Fetal Bovine Serum (FBS) was processed in California, USA. The lot was quarantined until USDA safety tested and approved this lot for commercial distribution.

The cattle have never been in contact with or have never had any association to any herds that have had any breakout of BSE (Bovine Spongiform Encephalopathy). The cattle have never had any association with any other animal or animals that could transfer TSE (Transmissible Spongiform Encephalopathy).

**Country of Raw Material Origin: Mexico** 

**Country of Final Processing:** United States

**Filtration:** Triple 0.1 µm filtered.

# Certificate of Analysis

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## **Product Integrity Analysis:**

This serum has been tested by the manufacturer and observed to conform to the following specifications:

| Test                          | Specification      |  |
|-------------------------------|--------------------|--|
| Appearance                    | Clear Amber Liquid |  |
| Bacteria and Fungi            | Not Detected       |  |
| Mycoplasma                    | Not Detected       |  |
| DNA                           |                    |  |
| Virus Testing:                |                    |  |
| BAV1                          | Not Detected       |  |
| BAV5                          | Not Detected       |  |
| BVDV                          |                    |  |
| Type 1, 2 BVD, Cytopathic BVD | Tested             |  |
| BPV                           | Not Detected       |  |
| BRSV                          | Not Detected       |  |
| BTV                           | Not Detected       |  |
| Rabies                        | Not Detected       |  |
| REO                           | Not Detected       |  |
| CPE—Giemsa (IBR)              | Not Detected       |  |
| Hemadsorption Agents (P13)    | Not Detected       |  |
| pH at RT                      | 6.5-8.5            |  |
| Osmolality                    | 260-350 mOsm/kg    |  |
| Endotoxin                     | ≤10.0 EU/ml        |  |
| Hemoglobin                    | ≤30.0 mg/dl        |  |
| Total Protein                 | 3.0–5.0 g/dl       |  |
| Electrophoretic Pattern       | Normal             |  |

## **Product Chemical Analysis:**

| Test                                  | Results   |         |
|---------------------------------------|-----------|---------|
| Biochemical Assay-                    | -Proteins | s/Other |
| Alkaline                              | 280       | U/l     |
| Phosphatase                           | 200       | U/I     |
| AST (SGOT)                            | 48        | U/l     |
| ALT (SGPT)                            | 11        | U/1     |
| GGT                                   | 5         | U/l     |
| Total Bilirubin                       | 0.10      | mg/dl   |
| BUN                                   | 16        | mg/dl   |
| Cholesterol                           | 33        | mg/dl   |
| Glucose                               | 86        | mg/dl   |
| Uric Acid                             | 2.1       | mg/dl   |
| Triglyceride                          | 57        | mg/dl   |
| Creatinine                            | 2.7       | mg/dl   |
| Bovine IgG                            | 181.80    | ma/1    |
| (ELISA)                               | 101.00    | mg/l    |
| Albumin                               | 1.7       | g/dl    |
| Alpha 1,2                             | 1.7       | g/dl    |
| Beta                                  | 0.2       | g/dl    |
| Gamma                                 | 0.0       | g/dl    |
| <b>Biochemical Assay—Trace Metals</b> |           |         |
| Calcium                               | 14.2      | mg/dl   |
| Chloride                              | 98        | mEq/l   |
| Phosphorus                            | 9.2       | mg/dl   |
| Potassium                             | 11.5      | mEq/l   |
| Serum Iron                            | 175       | μg/dl   |
| Sodium                                | 136       | mEq/l   |
| Biochemical Assay—Hormones            |           |         |
| T3                                    | 85.2      | ng/l    |
| T4                                    | 14.8      | μg/l    |

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

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### CATALOG NO.

631107

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