

## Tet System Approved FBS

**Catalog No.**  
631106

**Amount**  
500 ml

**Lot Number**  
A17051

### 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  $-20^{\circ}\text{C}$ .

### 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  $\mu\text{m}$  filtered.

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#### Takara Bio USA, Inc.

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# Certificate of Analysis

Cat. No. 631106

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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
Sterility	Negative for Growth
Bacteria and Fungi	Not Detected
Mycoplasma	Not Detected
DNA	Not Detected
Virus Testing:	
BAV1	Not Detected
BAV5	Not Detected
BVDV	
Type 1, 2 BVD, Cytopathic BVD	Not Detected
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
Serum Neutralization	
BVDV Antibody Type 1	1:4
BVDV Antibody Type 2	Undiluted
USDA Safety Testing	Pass
pH at RT	6.5–8.5
Osmolality	260–350 mOsm/kg
Endotoxin	≤10.0 EU/ml
Hemoglobin	<30.0 mg/dl
Total Protein	2.5–4.0 g/dl
Electrophoretic Pattern	Normal
Performance Testing	
MTT Assay	>75% of Control
Cytotoxicity	None Observed
Hybridoma Screened	>75% of Control

## Product Chemical Analysis:

Test	Results
<b>Biochemical Assay—Proteins/Other</b>	
Alkaline Phosphatase	201 IU/l
AST (SGOT)	75 IU/l
ALT (SGPT)	7 IU/l
GGT	5 IU/l
Total Bilirubin	0.2 mg/dl
BUN	17 mg/dl
Cholesterol	30 mg/dl
Glucose	116 mg/dl
Uric Acid	2.7 mg/dl
Triglyceride	61 mg/dl
Creatinine	2.6 mg/dl
Bovine IgG (ELISA)	202.4 µg/ml
Total Protein	3.6 g/dl
Albumin	1.9 g/dl
Alpha 1,2	1.2 g/dl
Beta	0.4 g/dl
Gamma	0.0 g/dl
<b>Biochemical Assay—Trace Metals</b>	
Calcium	13.1 mg/dl
Chloride	97 mEq/l
Phosphorus	10.0 mg/dl
Potassium	>10.0 mEq/l
Serum Iron	188 µg/dl
Magnesium	3.2 mg/dl
Sodium	134 mEq/l
<b>Biochemical Assay—Hormones</b>	
Testosterone	<0.01 ng/ml
Estradiol	27.9 pg/ml
Insulin	7.81 µIU/ml
Cortisol	0.302 µg/dl
Progesterone	<0.1 ng/ml
T3	138 ng/dl
T4	9.0 µg/dl

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

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631106

### NOTICE TO PURCHASER:

Our products are to be used for research purposes only. They may not be used for any other purpose, including, but not limited to, use in drugs, in vitro diagnostic purposes, therapeutics, or in humans. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without prior written approval of Takara Bio USA, Inc.

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