## Certificate of Analysis



## **Tet System Approved FBS**

Catalog No.AmountLot Number63110750 ml (sample)A19066

## **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

Tet System Approved FBS

#### **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	
Hemadsorbtion Agents (P13)	Not Detected	
Serum Neutralization		
BVDV Antibody Type 1	<undiluted< td=""></undiluted<>	
BVDV Antibody Type 2	<undiluted< td=""></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	3.0–5.0 g/dl	
Electrophoretic Pattern	Normal	
Performance Testing		
MTT Assay	>75% of Control	
Cytotoxicity Assay	None Observed	
Hybridoma Screened	>75% of Control	

Test	Results		
Biochemical Assay—Proteins/Other			
Alkaline	286	TU/1	
Phosphatase	280	10/1	
AST (SGOT)	34	IU/l	
ALT (SGPT)	5	IU/l	
GGT	5	IU/l	
Total Bilirubin	0.2	mg/dl	
BUN	15	mg/dl	
Cholesterol	30	mg/dl	
Glucose	68	mg/dl	
Uric Acid	1.9	mg/dl	
Triglyceride	65	mg/dl	
Creatinine	2.8	mg/dl	
Bovine IgG	112.3	μg/ml	
(ELISA)	112.3	μg/IIII	
Total Protein	3.4	g/dl	
Albumin	1.9	g/dl	
Alpha 1,2	1.2	g/dl	
Beta	0.2	g/dl	
Gamma	0.1	g/dl	
Biochemical Assay-			
Calcium	13.1	mg/dl	
Chloride	99	mEq/l	
Phosphorus	9.0	mg/dl	
Potassium	>10.0	mEq/l	
Serum Iron	178	μg/dl	
Magnesium	3.1	mg/dl	
Sodium	137	mEq/l	
Biochemical Assay—Hormones			
Testosterone	< 0.01	ng/ml	
Estradiol	26.8	pg/ml	
Insulin	3.44	$\mu IU/ml$	
Cortisol	0.317	μg/dl	
Progesterone	< 0.1	ng/ml	
T3	71.3	ng/dl	
T4	24.0	μg/dl	

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

Takara Bio USA, Inc.

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