# Certificate of Analysis



# **Tet System Approved FBS, US-Sourced**

Catalog No(s).AmountLot Number631101500 mlA19023

## **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 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. This FBS has been processed in the United States.

### **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 with the Tet-Off® CHOAA8-Luc cell line which is sensitive to nanogram concentrations of tetracyclines. The full range of induction possible with the Tet system was observed.

#### Manufacturer testing:

This material was collected at USDA approved abattoirs located in the United States. The dams of the fetuses received ante and post mortem inspection and are found free of contagious disease. The product meets European Union requirements for production of technical blood products.

The cattle have never been in contact with or have never had any association to any herds that have had a 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). The country of origin of the crude blood (donor cow) is USA.

#### Filtration:

Triple 0.1 µm filtered.

## **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	
BVD Type 1, 2 BVD		Not Detected	
BVD Cytopathic		Not Detected	
BPV		Not Detected	
BRSV		Not Detected	
BTV		Not Detected	
Rabies		Not Detected	
REO		Not Detected	
CPE - Giemsa (IBR)		Not Detected	
P13 Hemadsorbing		Not Detected	
Serum Neutralization			
BVDV Antibody Type 1		1:4	
BVDV Antibody Type 2		1:2	
pH at RT		6.5-8.5	
Osmolality		260–350 mOsm/kg	
Endotoxin		≤10.0 EU/ml	
Hemoglobin		≤20.0 mg/dl	
Total Protein		3.0-4.5 gm/dl	
Electrophoretic Pattern		Normal	
Performance Testing	MTT Assay	>75% of Control	
	Cytotoxicity	None Observed	
Hybridoma Screened		>75% of Control	

### **Product Chemical Analysis:**

Test	Results	S			
Biochemical Assay-	–Protein	s/Other			
Alkaline	241	IU/l			
Phosphatase	241	10/1			
AST (SGOT)	61	IU/l			
ALT (SGPT)	7	IU/l			
GGT	4	IU/l			
Total Bilirubin	0.3	mg/dl			
BUN	14	mg/dl			
Cholesterol	25	mg/dl			
Glucose	100	mg/dl			
Uric Acid	2.6	mg/dl			
Triglyceride	60	mg/dl			
Creatinine	2.3	mg/dl			
Bovine IgG	90.4	μg/ml			
(ELISA)	70.4	μg/IIII			
Total Protein	3.4	g/dl			
Albumin	1.9	g/dl			
Alpha 1, 2	1.2	<i>-</i>			
Beta	0.2	g/dl			
	Biochemical Assay—Trace Metals				
Calcium	12.7	mg/dl			
Chloride	95	mEq/l			
Phosphorus	9.2	mg/dl			
Potassium	>10.0	mEq/l			
Serum Iron	169	μg/dl			
Magnesium	3.0	mg/dl			
Sodium	133	mEq/l			
Biochemical Assay-	-Hormo	nes			
Testosterone	< 0.01	ng/ml			
Estradiol	43.6	pg/ml			
Insulin	6.34	μIU/ml			
Cortisol	0.221	μg/dl			
Progesterone	< 0.2	ng/ml			
T3	115	ng/dl			
T4	15.0	μg/dl			

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

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# **Tet System Approved FBS, US-Sourced**

### CATALOG NO.

631101

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