# Certificate of Analysis



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

Catalog No(s).AmountLot Number631101500 mlA19070

## **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.

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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		
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		Undiluted		
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		
Hyl	oridoma Screened	>75% of Control		

### **Product Chemical Analysis:**

Test	Results	S		
Biochemical Assay-	–Protein	s/Other		
Alkaline	199	IU/l		
Phosphatase	199	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	26	mg/dl		
Glucose	98	mg/dl		
Uric Acid	2.4	mg/dl		
Triglyceride	57	mg/dl		
Creatinine	2.6	mg/dl		
Bovine IgG	147.3	- <b>1</b>		
(ELISA)	147.3	μg/ml		
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—Trace Metals				
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	2.9	mg/dl		
Sodium	137	mEq/l		
Biochemical Assay—Hormones				
Testosterone	< 0.01	ng/ml		
Estradiol	53.3	pg/ml		
Insulin	5.19	μIU/ml		
Cortisol	0.411	μg/dl		
Progesterone	< 0.1	ng/ml		
T3	85.6	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.

(050517) Page 2 of 2



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### CATALOG NO.

631101

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4/6/2020