

**CERTIFICATE OF ANALYSIS**

**Fetal Bovine Serum (Panamá, USDA approved) - 500ml Unpacked**

Batch N°	S00CM	Storage	-20°C
ID N°	S00CM1	Filtration	Triple 0.1 µm filtered
Material N°	S1600-6-500U	Batch size	975,50 L
Validation date	12-SEP-2019	Origin	Panama
Expiry date	10-SEP-2024		

QUALITY PROFILE				
Tests	Methods	Units	Specifications	Results
Appearance	Visual Control	-	Clear straw to amber liquid	Conform
Bacteria and Fungi	Culture	-	Not detected	Not detected
Mycoplasma	Culture	-	Not detected	Not detected
pH	Internal validated method	-	6,80 - 8,00	7,29
Osmolality	Freezing point . EU Ph. 2.2.35	mOsm/kg	280 - 345	305
Endotoxin	Chromokin. test Method D of EU Ph.2.6.14	EU/ml	0,000 - 50,000	0,398
Haemoglobin	Internal validated method	mg/100ml	0,00 - 40,00	11,89
Total protein	Biuret colorimetry	g/l	25,0 - 55,0	35,5
Pestivirus eg. BVD virus	Cell culture observation and IFA	-	Tested	Tested
Cytopathogenic Agents eg. IBR / BHV-1	Cell culture observation	-	Not detected	Not detected
Haemadsorbing Agents eg. PI3 virus	Cell culture observation	-	Not detected	Not detected

CHEMICAL PARAMETERS				
Tests	Methods	Units	Specifications	Results
ALAT (SGPT)	UV kinetic at 37°C	IU/l	For information	8
Alkaline Phosphatase	Colorimetry kinetic at 37°C	IU/l	For information	346
ASAT (SGOT)	UV kinetic at 37°C	IU/l	For information	27
Bilirubin	DPD / cafeine colorimetry	mg/100ml	For information	0,16
Calcium	Arsénazo colorimetry	mg/100ml	For information	14,2
Gamma GT	Colorimetry kinetic at 37°C	IU/l	For information	7
Cholesterol	Cholesterase Trinder colorimetry	mg/100ml	For information	34,0
Creatinine	Colorimetry Kinetic (Jaffé)	mg/100ml	For information	2,8
Chloride	Indirect potentiometry	mmol/l	For information	103
Glucose	Hexokinase UV	mg/100ml	For information	60,0
Iron	TPTZ colorimetry	µg/100ml	For information	153
Lactate Dehydrogenase	UV kinetic at 37°C	IU/l	For information	519
Phosphorus	Phosphomolybdate colorimetry	mg/100ml	For information	9,0
Potassium	Indirect potentiometry	mmol/l	For information	11,3
Sodium	Indirect potentiometry	mmol/l	For information	137
Triglycerides	Glycerokinase Trinder colorimetry	mg/100ml	For information	62,0
Urea	Urease UV	mg/100ml	For information	40,0
Uric Acid	Uricase trinder colorimetry	mg/100ml	For information	1,5



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PROTEIN ELECTROPHORESIS				
Tests	Methods	Units	Specifications	Results
Albumin	Immunoturbidimetry	g/l	For information	17,3
Alpha Globulins	Immunoturbidimetry	g/l	For information	16,4
Beta Globulins	Immunoturbidimetry	g/l	For information	1,8
Gamma Globulins	Immunoturbidimetry	g/l	For information	0,1

ELISA TEST				
Tests	Methods	Units	Specifications	Results
IgG	ELISA test	mg/l	For information	119,1

BIOLOGICAL PERFORMANCE				
Tests	Methods	Units	Specifications	Results
L929 cell growth : 3rd day	Internal validated method	%	For information	110
L929 cell growth : 6th day	Internal validated method	%	For information	106
SP2/O-Ag14 cell growth : 3rd day	Internal validated method	%	For information	59
SP2/O-Ag14 cell growth : 6th day	Internal validated method	%	For information	84
HELA cell growth : 3rd day	Internal validated method	%	For information	113
HELA cell growth : 6th day	Internal validated method	%	For information	115
MRC-5 cell growth : 3rd day	Internal validated method	%	For information	111
MRC-5 cell growth : 6th day	Internal validated method	%	For information	69
Plating efficiency -cells implanted	Internal validated method	-	500	500
Plating efficiency - number of colonies	Internal validated method	-	For information	322
Plating efficiency - PE absolute	Internal validated method	%	For information	66
Plating efficiency - PE relative	Internal validated method	%	For information	100
Cloning efficiency -cells implanted/well	Internal validated method	-	1	1
Cloning efficiency - number of clones	Internal validated method	-	For information	44
Cloning efficiency - CE absolute	Internal validated method	%	For information	46
Cloning efficiency - CE relative	Internal validated method	%	For information	78

All fetal bovine sera are collected from registered slaughterhouses under the supervision of government veterinary authorities.  
All sera are collected from EU approved countries

LCAILLEAU  
Quality Department  
Date

08-OCT-2019