Nobimpex
79336 Herbolzheim
In der Kammerten 22,Germany
Tel: 0049-7643-93746-22
Fax: 0049-7643-93746-23

Certificate of Analysis

FBS Premium

South America Origin (Brazil)

Cat No.:	B119-100 / B119-500	Lot No.:	P220802
Production Date:	31st August, 2022	Expiry Date:	30th August, 2027
Storage:	-15℃ or below	Page:	1 / 2

Physical and Chemical Analysis

	Specifications	Results
Appearance	Clear amber liquid	Clear amber liquid
pH [1]	6.7 – 8.0	7.50
Osmolality [2]	260 -340 mOsmol/kg	308 mOsmol/kg
Endotoxin [3]	< 30 EU/ml	<1 EU/ml
Hemoglobin [4]	< 25 mg/100ml	9.4 mg/100ml

Protein Profile

	Specifications	Results
Total Protein [5]	30 - 50 g/L	40.05 g/L
IgG [6]	<350 µg/ml	322 µg/ml

Sterility Testing

	Specifications	Results
Sterility [7]	not detected	not detected
Mycoplasma [8]	not detected	not detected

Virus Testing

	Specifications	Results
Bovine Viral Diarrhea virus[9]	not detected	not detected
Infectious Bovine Rhinotracheitis [10]	not detected	not detected
Bluetongue virus[10]	not detected	not detected
Parainfluenza virus 3[10]	not detected	not detected
Bovine Leukaemia virus[10]	not detected	not detected
Bovine Herpesvirus 1[10]	not detected	not detected
Reovirus[10]	not detected	not detected
Hemadsorption[11]	not detected	not detected
Cytopathic Effect[11]	not detected	not detected

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Cell-Culture Tests

	Specifications	Results
Growth Rate	＞80%	90%
Cloning Efficiency (SP2/0-Ag14)	＞70%	86%

Cell Growth(SP2/0-Ag14)	Seed	Day 3	Day 6 [cells per ml]
Lot No.P220802	2.00×10^5	1.00×10^6	1.00×10^7
Control Serum	2.00×10^5	1.00×10^6	1.00×10^7

Cell Growth(293T)	Seed	Day 3	Day 6 [cells per ml]
Lot No.P220802	1.50×10^5	1.50×10^6	1.50×10^7
Control Serum	1.50×10^5	1.50×10^6	1.50×10^7

References

[1] Potentiometric Determination; Current Edition EP
[2] Freeze-Point Depression; Current Edition EP
[3] Gel-clot technique; Current Edition EP
[4] Spectophotometric Method
[5] Determination by Biuret ; Current Edition EP
[6] ELISA
[7] Direct Inoculation; Current Edition EP
[8] Culture + Indicator Cell Assay
[9] Cytopathic Effect in Cell Culture and Immunofluorescence
[10] Immunofluorescence + NAT
[11] Cell Culture Method

These signatures indicate the material mentioned above has met specifications and has been reviewed by the quality unit.

Signature:	Alessia	Signature:	
Position:	QC inspector	Position:	Approver
Issue date:	30th September, 2022	Issue date:	30th September, 2022