

## Certificate of Analysis

Product	Fetal Bovine Serum ES Cell	Pre-tested ,Collected in South Ame	rica, sterile-filtered
Cat. No.	AB-FBS-ES-0500, AB-FBS-E	S-1050	
Lot. No.	AB20214215	Expiry Date	04/2026
Origin	South America	Manufacturing Date	04/2021
		Storage	≤-15°C

Quality Profile	Specification	Result	Unit
Appearance	Clear amber	Pass	
рН	6.8 - 8.2	7.20	
Osmolality <sup>(1)</sup>	280 - 340	299	mOsm/kg
Endotoxin <sup>(2)</sup>	As reported	0.41	EU/mI
Hemoglobin	≤ 25	16.2	mg/dl
Glucose	As reported	2.59	mM
Calcium	As reported	3.29	mM
Phosphorous	As reported	2.70	mM
GOT/AST	As reported	59	U/I
LDH	As reported	753	U/I

Protein Profile			
Total Protein <sup>(3)</sup>	3.0 - 4.5	3.6	g/dl
Albumin <sup>(4)</sup>	As reported	1.8	g/dl
IgG	≤ 250.0	195.32	mg/l

Sterility Testing			
Bacteria and Fungi	Not detected	Not detected	
Mycoplasma <sup>(5)</sup>	Not detected	Not detected	

Virus Testing <sup>(6)</sup>		
Bovine Herpes Virus (BHV-1 and BHV-5)	Not detected	Not detected
Pestivirus (e.g. BVD-V)	Not detected	Not detected
Parainfluenza Virus Type 3 (PI-3)	Not detected	Not detected

Biological Performance			
Cell Growth MDCK (Madin-Darby Canine Kidney Line) <sup>(7)</sup>	≥ 75.0	99.0	%
Cell Growth CHO (Chinese Hamster Ovary Cell Line) <sup>(7)</sup>	≥ 75.0	100.0	%
Mouse Stem Cell Test ES (D3) Inhibition Test on Differentiation	≥ 75.0	92.0	%

## References/Methods

(1) Freeze Point Depression

- (2) Chromokinetic Test
- (3) Biuret Colorimetry
- (4) Immunoturbidimetry

(5) Cell Culture

(6) Cytopathic Effect in Cell Culture and ELISA

(7) Growth Promoting Assay

Intended Use	For research use only.
Date	June 01, 2021

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