Certificate of Analysis



Product Fetal Bovine Serum ES Cell Pretested, Collected in South America, sterilefiltered

Cat .No. AB-FBS-ES0500(500 ml),AB-FBS-ES0100(100ml) Expiry Date 02/2023

Lot No. AB20182223 Storage ≤-15℃

Quality Profile	Specification	Result	Unit
Appearance	Clear amber	Pass	
рН	6.8- 8.2	7.44	
Osmolality ⁽¹⁾	280- 340	294	mOsm/kg
Endotoxin ⁽²⁾	As reported	< 0.25	EU/ml
Hemoglobin	≤25	14.3	mg/dl
Glucose	As reported	2.55	mM
Calcium	As reported	3.38	mM
Phosphorous	As reported	2.70	mM
Protein Profile			
Total Protein ⁽³⁾	3.0- 4.5	3.7	g/dl
Albumin ⁽⁴⁾	As reported	2.3	g/dl
IgG	<250	147	μ g/ml
Sterility Testing			
Bacteria and Fungi	Not detected	Not detected	
Mycoplasma ⁽⁵⁾	Not detected	Not detected	
Virus Testing ⁽⁶⁾			
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 ⁽⁷⁾			
Cell Growth L929 (Murine Fibroblasts)	≥ 75 %	99 %	
Cell Growth MRC-5 (Human Lung Fibroblasts)	≥ 75 %	100 %	
Mouse Stem Cell Test ES (D3) Inhibition Test on Differentiation	≥ 75 %	92 %	

(5) Cell Culture

References/Methods

(1) Freeze Point Depression

(2) Chromokinetic Test (6) Cytopathic Effect in cell Culture and ELISA

(3) Biuret Colorimetry (7) Growth Promoting Assay

(4) Immunoturbidimetry

Intended Use: For research use only.

Date: February 15,2018

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