



## CERTIFICATE OF ANALYSIS

Product Name: Dulbecco's Modified Eagle's / Ham's F12 Medium  
With L-Glutamine and 15 mM HEPES Buffer  
Without Sodium Bicarbonate

MADE IN THE USA

Catalog Number: DFP18

Storage: 2 to 8°C

Manufacture Date: FEB-2018

Lot Number: 02180001

Expiration Date: 28-FEB-2022

Test	Specifications	Results
Appearance	Off-White to Orange Powder	Pass
Solubility (in H <sub>2</sub> O)	15.57 g/L in ≤ 30 minutes	21 minutes, with warming
Moisture Content	≤ 2%	≤ 1%
Particle Size (100 mesh)	≥ 90 %	≥ 90%
pH ( <i>measured at 33°C</i> )		
Without NaHCO <sub>3</sub>	5.6 - 6.0	5.71
With 1200 mg/L NaHCO <sub>3</sub>	Record	6.67
Osmolality		
Without NaHCO <sub>3</sub>	260 - 320 mM/Kg	277 mM/Kg
With 1200 mg/L NaHCO <sub>3</sub>	Record mM/Kg	290 mM/Kg
Endotoxin	≤ 1.0 EU/mL	< 0.15 EU/mL
<i>Endotoxin testing was performed using the LAL detection method.</i>		
Mycoplasma	Negative	NEGATIVE
<i>Mycoplasma test was performed using MycoAlert® Mycoplasma Detection Assay.</i>		
Animal Cell Culture		
Cell Growth Promotion	3 Passages	PASS
Viability	≥ 80%	> 85%
<i>Medium was supplemented with 10% FBS and 1200 mg/L NaHCO<sub>3</sub>, adjusted to pH 7.34, then tested using CHO cells grown in a monolayer in a 5% CO<sub>2</sub> atmosphere.</i>		

**This product was produced and tested in accordance with all relevant SOP's and meets or exceeds the quality standards established by Caisson Laboratories, Inc.**

*This product is intended for laboratory use only.*

Prepared by:

Reviewed by:

Kurt Rieben  
Quality Control

02/17/2018

BSE/TSE Declaration

To the present state of our knowledge we declare that this product does not contain any BSE/TSE AGENT. This declaration is given in good faith and no warranty express or implied with respect to quality and properties is made.