



## Certificate of Analysis

KnockOut(TM) DMEM/F-12  
1X  
– HEPES  
– L-glutamine

Catalog Number: 12660  
Lot Number: 2048089

Storage Temperature: 2 to 8C  
Storage Instructions: Protect from light  
Expiration Date: 2020-06

For research use only. Not for use in diagnostic procedures.

Sterile filtered (0.1 um)

TEST	SPECIFICATION	RESULT	UNITS
<sup>1</sup> Endotoxin Testing	<=1	<0.03	EU/mL
<sup>2</sup> Osmolality	>=270 to <=290	278	mOsm/kg
<sup>3</sup> pH	>=7.0 to <=7.4	7.3	
<sup>4</sup> Sp2 Toxicity Assay	Acceptable	Acceptable	
<sup>5</sup> Sterility Testing	Negative	Negative	

Read SDS

Quality Systems Department

Date: 27-Dec-2018

### REFERENCES:

- 1 Current United States Pharmacopeia, <85> Bacterial Endotoxins Test.
- 2 Thermo Fisher Scientific Specifications.
- 3 Thermo Fisher Scientific Specifications.
- 4 Thermo Fisher Scientific Specifications, Ref.: GIBCO Catalog. Cell Line Used: Sp2/O-Ag14 (ATCC No. CRL-1581). Test samples were evaluated for nutritional support of target cells utilizing the murine myeloma cell line Sp2/O-Ag14 (Sp2). Comparable growth rates of Sp2 cells in samples of complete test medium were obtained relative to parallel cultures grown in reference control medium.
- 5 Current Edition of USP, Thermo Fisher Scientific Modified.