



Certificate of Analysis

**FreeStyle(TM) 293 Expression Medium
+ GlutaMAX(TM) - I**

Catalog Number: 12338
Lot Number: 1778049

Storage Temperature: 2 to 8C
Storage Instructions: Store in the dark
Expiration Date: 2017-03

Caution: For manufacturing, processing, or repacking.

TEST	SPECIFICATION	RESULT	UNITS
¹ Endotoxin Testing	Tested	<0.06	EU/mL
² FreeStyle 293 Expression Medium Performance Assay	Acceptable	Acceptable	
³ Osmolality	>=255 to <=300	272	mOsm/kg
⁴ pH	>=7.0 to <=7.6	7.3	
⁵ Sterility Testing	Negative	Negative	

Read SDS

Quality Systems Department

Date: 21-Mar-2016

REFERENCES:

- 1 Current United States Pharmacopeia, <85> Bacterial Endotoxins Test.
- 2 Life Technologies Specification: Each lot of FreeStyle 293 Expression Medium is tested as a complete medium for its ability to expand FreeStyle 293-F cells. Each lot of medium is tested for its ability to support the growth of the FreeStyle 293-F cells during two subcultures. At each passage, cells are subcultured to the original cell inoculation of 1x10⁵ viable cells/mL. On day 10, expanded cells are assayed for viable cell density. Cell expansion in test and positive control media conditions are measured by the average of viable cell density counts and are found to be acceptable according to GIBCO internal specifications.
- 3 Life Technologies Specifications.
- 4 Life Technologies Specifications.
- 5 Current Edition of USP, Life Technologies Modified.