



**LAL Division**  
 Wako Chemicals USA, Inc.  
 1600 Bellwood Road  
 Richmond, VA 23237

Phone: (804) 271-7677  
 Fax: (804) 271-7791

Page 1 of 1

## Certificate of Analysis

*Relationship Between Control Standard Endotoxin (CSE) and Reference Standard Endotoxin (RSE) – PYROSTAR™ ES-F Multi (Kit)*

RSE:	USP Endotoxin Reference Standard Lot # HOK354, 10,000 EU/vial
CSE:	Control Standard Endotoxin (Wako Chemicals USA, Inc.)
CSE Lot No.:	G-60USA
Concentration:	500 ng/vial, <i>E. coli</i> UKT-B
Tested Against:	<b><i>Limulus Amebocyte Lysate</i></b> <b><i>PYROSTAR™ ES-F MULTI TEST (5.2 mL)</i></b> <b><i>SENSITIVITY 0.125 EU/mL</i></b>
LAL Lot No.:	041607
Production Date:	12 APR 2016
Sensitivity:	0.125 EU/mL
Expiration Date:	2019.03
Determination Method:	KTA
<u>Approximate Biological Activity:</u>	
EU per Vial:	5,500 EU/vial
<b>Method</b> Reconstitute the CSE with 5.5 mL LAL Reagent Water to get 1,000 EU/mL and vortex for 2 minutes at room temperature. After reconstitution, store CSE at 2→10°C for up to 1 month. DO NOT FREEZE CSE. For subsequent usages, vigorously vortex the solution for 1 minute before use. Vortex each CSE dilution for at least 30 seconds during preparation of dilutions.	
<b>Reference</b> United States Pharmacopeia (USP), 2011, General Chapter <85>, Bacterial Endotoxins Test (BET)	
This is to certify that this product lot was manufactured according to current cGMP Standards, meets Wako Chemicals USA – LAL Division's product specifications, and complies with all applicable requirements for product release.	

Created By: Jason Holliday Date: 5/20/16  
 Quality Assurance Approval By: Justin White Date: 5/20/16