

## **Certificate of Analysis for NR-447**

## Porcine Transmissible Gastroenteritis Virus (TGEV), Miller

Catalog No. NR-447

**Product Description:** Cell lysate and supernatant from swine testicular (ST) cells<sup>1</sup> infected with porcine TGEV, Miller.

Lot<sup>2,3</sup>: 57689881 Manufacturing Date: 30MAY2008

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in ST Cells <sup>1</sup>	Report results	Cell rounding and sloughing
Identification by Direct Fluorescent Antibody Assay <sup>4</sup>	Fluorescence observed	Fluorescence observed
Sequencing of Species-Specific Region	Consistent with TGEV	Consistent with TGEV
Titer by TCID <sub>50</sub> Assay <sup>5,6</sup> in ST Cells <sup>1</sup>	Report results	8.89 X 10 <sup>6</sup> TCID <sub>50</sub> /mL
Functional Activity by RT-PCR Assay	~ 430 bp amplicon	~ 430 amplicon
Sterility (21-day incubation)  Harpo's HTYE broth <sup>7</sup> , 37°C and 26°C, aerobic Trypticase soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Sheep blood agar, 37°C, aerobic Sheep blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C and 5% CO <sub>2</sub>	No growth	No growth
Mycoplasma Contamination  Agar and broth culture (14-day incubation at 37°C)  DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected	None detected None detected

<sup>&</sup>lt;sup>1</sup>ST cells: ATCC<sup>®</sup> CRL-1746™

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<sup>&</sup>lt;sup>2</sup>The inoculum for this lot was BEI Resources NR-447 (Lot 4462784), which was determined by PCR to be contaminated with *Mycoplasma orale*. Upon three passages in the presence of 0.5 μg/mL mycoplasma removal agent (MP 30-500-44), PCR tests showed the live virus to be clean and free of mycoplasma contamination. Source virus for NR-447 (Lot 4462784) was prepared in ST cells and provided by the Food Animal Health Research Program, Ohio Agricultural Research and Development Center, The Ohio State University, Wooster, Ohio.

<sup>&</sup>lt;sup>3</sup>Grown in Minimum Essential Medium containing Earle's salts and non-essential amino acids (Invitrogen™ 10370-021), 2 mM L-glutamine (Invitrogen™ 25030-081), and 1 mM sodium pyruvate (Invitrogen™ 11360-070) for 3 days at 37°C with 5% CO₂

<sup>&</sup>lt;sup>4</sup>Using fluorescein-isothiocyanate conjugate monoclonal antibody specific to TGEV (VMRD 210-50-TGE)

<sup>&</sup>lt;sup>5</sup>The Tissue Culture Infectious Dose 50% (TCID<sub>50</sub>) endpoint is the 50% infectious endpoint in cell culture. The TCID<sub>50</sub> is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the culture vessels inoculated, just as a Lethal Dose 50% (LD<sub>50</sub>) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID<sub>50</sub> provides a measure of the titer (or infectivity) of a virus preparation.

<sup>&</sup>lt;sup>6</sup>2 days at 37°C with 5% CO<sub>2</sub>

<sup>&</sup>lt;sup>7</sup>Atlas, Ronald M. <u>Handbook of Microbiological Media</u>. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.



## **Certificate of Analysis for NR-447**

**Date:** 28AUG2008 **Signature:** Signature on file

**Title:** Technical Manager, BEI Authentication or designee

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