

Genomic RNA from Influenza A Virus, A/California/04/2009 (H1N1)pdm09, Cell Isolate (Produced in Cells)

Catalog No. NR-14689

Product Description: Genomic RNA was isolated from a preparation of cell lysate and supernatant from Madin-Darby canine kidney cells (MDCK)¹ infected with influenza A virus, A/California/04/2009 (H1N1)pdm09.

Lot²: 58685092

Manufacturing Date: 09NOV2009

TEST	SPECIFICATIONS	RESULTS
Type/Subtype Identification and Purity by RT-PCR Influenza A virus (InfA) Influenza A virus, subtype H1 (human) Influenza A virus, subtype H3 (human) Influenza A virus, subtype H5 (human) Influenza A virus (swInfA) Influenza A virus (swH1) Influenza B virus	Detected None detected None detected None detected Detected Detected None detected	Detected None detected None detected None detected Detected Detected None detected
Sequencing of Influenza A Specific Region Matrix gene (883 nucleotides)	Identical to A/California/04/2009 (H1N1)pdm09 (GenBank: FJ966085)	Identical to A/California/04/2009 (H1N1)pdm09 (GenBank: FJ966085)
Total RNA Content by RiboGreen[®] Measurement (Viral, Cellular and Carrier)	Report results	12 ng per 100 µL
Functional Activity by RT-PCR Amplification^{3,4}	~ 1030 bp amplicon	~ 1030 bp amplicon (See Figure 1)
Virus Inactivation⁵	Non-infectious	Non-infectious
Sodium Azide Content	Report results	0.0004%

¹MDCK cells (ATCC[®] CCL-34[™])

²Nucleic acid was extracted from a preparation of influenza A virus, A/California/04/2009 (H1N1)pdm09, Cell Isolate (BEI Resources NR-13658; Lot 58633728) using a QIAamp[®] Viral RNA Mini kit (Qiagen 52906).

³Amplified using 1:10 dilution of NR-14689 and One-Step RT-PCR Kit (Qiagen 210212)

⁴The primers are described in Hoffmann, E., et al. "Universal Primer Set for the Full-Length Amplification of All Influenza A Viruses." *Arch. Virol.* 146 (2001): 2275-2289. PubMed: 11811679.

⁵This extraction procedure has been shown to consistently inactivate 100% of influenza viruses using a number of methods designed to detect the virus in cells: 1) cytopathic effect (100% plating, 10% plating, blind passage sub-culturing) and 2) indirect immunofluorescence of viral antigens.

Date: 22 MAY 2013

Signature: *Dorothy C. Young*

Title: Technical Manager, BEI Authentication or designee

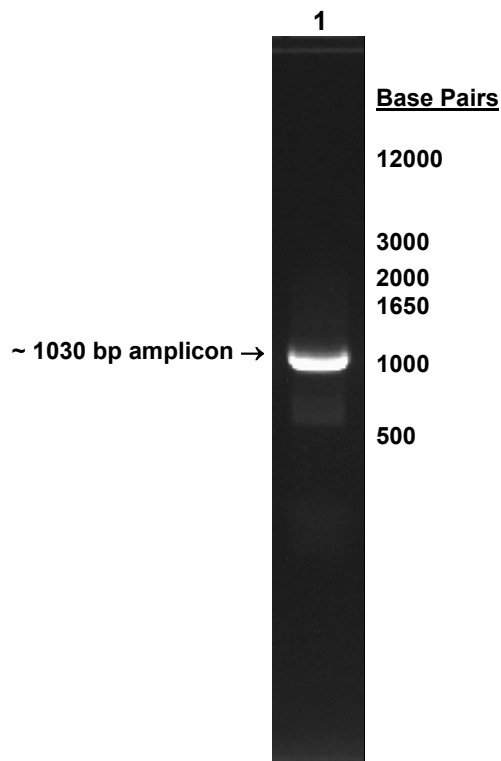
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Figure 1



Lane 1: 10-fold dilution of NR-14689
Marker: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder