

Influenza A Virus H2 Primers

Catalog No. NR-12074

This reagent is the tangible property of the U.S. Government.

For research use only. Not for human use.

Contributor:

BEI Resources

Manufacturer:

Integrated DNA Technologies, Inc.

Product Description:

Influenza A viruses are classified into subtypes and named based on the identity of their neuraminidase and hemagglutinin (HA) surface proteins. NR-12074 contains forward and reverse primers that specifically amplify a region of the HA gene of influenza A virus subtype 2 (H2). A protocol is outlined in Appendix I.

Material Provided:

Each vial contains approximately 80 µL of a mixture of forward and reverse primers in TE buffer (pH 7.0). The concentration is shown on the Certificate of Analysis.

Packaging/Storage:

Primers were packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -60°C or colder upon arrival. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Influenza A Virus H2 Primers, NR-12074."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Lee, M. S., et al. "Identification and Subtyping of Avian Influenza Viruses by Reverse Transcription-PCR." [J. Virol. Methods](#) 97 (2001): 13-22. PubMed: 11483213.

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APPENDIX I

Influenza A Virus H2 Primers

Recommended Reagents/Equipment

| Reagent | Source | Catalog # |
|--|---------------|-----------|
| Influenza A Virus H2 Primers | BEI Resources | NR -12074 |
| Positive Control Template, Genomic RNA from Influenza A Virus, A/duck/Germany/1215/1973 (H2N3) | BEI Resources | NR-2762 |
| Qiagen OneStep RT-PCR Kit | Qiagen | 210212 |

Reaction Mix¹

| Reagent | Stock Concentration | Volume per Reaction (µL) |
|----------------------------------|---------------------|--------------------------|
| RNase-free water | --- | 19 |
| Qiagen OneStep RT-PCR Buffer | 5X | 10 |
| Q Solution | 5X | 10 |
| dNTP Mix | 10 mM each | 2 |
| Qiagen OneStep RT-PCR Enzyme Mix | --- | 2 |
| Primers ² | 25 µM (each primer) | 2 |
| Template | 50 to 5000 ng | 5 |
| | | Total – 50 µL |

¹Reaction mix should be kept on bench-top cooler until ready for use.

²Primers are supplied at working stock concentrations.

Cycling Protocol

| Cycle | # of Repeats | Step | Conditions |
|-------|--------------|------|---------------------|
| 1 | 1 | 1 | 50°C for 30 minutes |
| 1 | 1 | 1 | 95°C for 15 minutes |
| 2 | 35 | 1 | 94°C for 30 seconds |
| | | 2 | 52°C for 30 seconds |
| | | 3 | 72°C for 1 minute |
| 3 | 1 | 1 | 72°C for 1 minute |
| 4 | Indefinite | 1 | Hold at 4°C |