

Avian Influenza H5 Gene, Qualitative Real-Time PCR

Avian influenza, also known as avian flu or bird flu, is an infectious disease of birds caused by type A strains of the influenza virus. Although avian influenza viruses usually do not infect humans, several instances have been reported since 1997. Most cases of human infection have most likely resulted from direct contact with infected poultry or contaminated surfaces during meal preparation. There is **no evidence** that properly cooked poultry or eggs are a source of infection. The symptoms of avian influenza have ranged from fever, cough, sore throat, and muscle aches to eye infections (conjunctivitis), pneumonia, acute respiratory distress, viral pneumonia, and other severe and life-threatening complications.

Sixteen subtypes of avian influenza virus are known to infect birds. Of these, H5N1 is of particular concern since it has demonstrated a capacity to directly infect and cause severe disease in humans. Unlike seasonal influenza, where infection causes only mild respiratory symptoms in most people, the disease caused by H5N1 follows an unusually aggressive clinical course, with rapid deterioration and a high fatality rate. Primary viral pneumonia and multi-organ failure are common, and the mortality rate is over 50%.¹ Most cases of avian influenza have occurred in previously healthy children and in young adults.

CLINICAL USE

This test was developed to detect avian influenza subtype H5 that emerged in Asia in 2003-2005. Significant genetic drift from this strain could adversely affect the sensitivity of this assay.

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Test Code	16090X
CPT Code	87798
Specimen Requirements	Nasopharyngeal or throat swab in M4 media. BAL or sputum.
Transport Temperature	Refrigerated preferred Room temperature acceptable Frozen unacceptable for sputum and BAL; acceptable for M4
Specimen Stability	Refrigerated: 1 week for sputum; 2 weeks for M4 and BAL Room temperature: 48 hours for sputum; 1 week for M4 and BAL Frozen: unacceptable for sputum and BAL; 1 month for M4
Set up and Reporting	1 day/week; reports in 2 days
Reference Ranges	Avian Influenza H5 Gene detected / not detected
Methodology	Real-Time Polymerase Chain Reaction

This test has been developed by and its performance characteristics determined by Quest Diagnostics, Nichols Institute. It has not been cleared or approved by the U.S. Food and Drug Administration. Performance characteristics refer to the analytical performance of the test.

This test is performed pursuant to a license agreement with Roche Molecular Systems, Inc.

1. World Health Organization

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HS0029 03/2006



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