Human Swine Flu/Influenza A (H1N1+H3N2) IgM ELISA Kit, 96 tests, Cat # 920-050-HAM

ADI swine flu/Influenza A (H1N1+H3N2) IgM Antibody ELISA Test Kit is an indirect ELISA for the qualitative (-ve or +ve) or quantitative detection or measurement of IgM class antibodies against two most common strains of swine flu antigens in human serum and plasma. The identification aids in the diagnosis of influenza (flu).

ELISA Kit Features

- Purified swine flu influenza A antigens (H1N1 & H3N2) coated, stabilized, 96-well strip plate
- Convenient Swine Flu IgM liquid stds (1, 10, 40, 150 U/ml)
- Sensitivity <1.0; 100 ul samples (diluted 1:100 or more)
- 110 min, 3 incubation step at room temp
- Samples (1:101 diluted serum or plasma).

For in vitro research use only.

Assay Procedure: Allow all reagents to reach room temperature. Arrange and label required number of strips.

Step 1. Pipet 100 ul each of standards and samples (1:100 or more) into the coated wells. Mix gently and incubate at RT for 60 min.
Step 2. Aspirate and wash the plate four times. Add 100ul of Anti-human IgM-HRP Conjugate to all wells, mix gently and incubate at room temperature for 30 min.
Step 3. Aspirate and wash the plate five times. Add 100 ul of TMB Substrate solution to all wells, mix gently, and incubate at RT for 20 min.
Step 4. Pipet 100 ul of stop solution into each well and mix gently (blue color turns yellow). Measure OD at A450 nm. Determine the presence of human anti-Influenza A IgG by comparing with the supplied –ve and cut off controls.

Interpretation of Results

<table>
<thead>
<tr>
<th>Negative</th>
<th>Equivocal</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;8 u/ml</td>
<td>(8-12 u/ml)</td>
<td>&gt;12 u/ml</td>
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</table>

Performance Characteristics

<table>
<thead>
<tr>
<th>Intra-assay precision</th>
<th>Inter-assay precision</th>
<th>Recovery</th>
<th>Linearity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.3%</td>
<td>10.8%</td>
<td>83-90%</td>
<td>73-122%</td>
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</tbody>
</table>

Clinical Specificity | Clinical Sensitivity | Crossreactivity |
<table>
<thead>
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<tbody>
<tr>
<td>100%</td>
<td>100%</td>
<td>No cross-reactivity to RSV, Adenovirus and Parainfluenza 1/2/3.</td>
</tr>
</tbody>
</table>

Expected values:

- N=72; IgM +ve (2.8%) Equivocal (0.0%) Negative (97.2%).

General Information

Swine influenza or swine flu, also called pig influenza, hog flu and pig flu, is an infection caused by any one of several types of swine influenza viruses. Swine influenza virus (SIV) or swine-origin influenza virus (S-OIV) is any strain of the influenza family of viruses that is endemic in pigs. The known SIV strains include influenza C and the subtypes of influenza A known as H1N1, H1N2, H2N1, H3N1, H3N2, and H2N3. Swine influenza virus is common throughout pig populations worldwide. Transmission of the virus from pigs to humans lead to human flu or Zoonotic swine flu. People with regular exposure to pigs are at increased risk of swine flu infection. Vaccination of these workers against influenza and surveillance for new influenza strains among this population may therefore be an important public health measure.

According to the Centers for Disease Control and Prevention (CDC), in humans the symptoms of the 2009 “swine flu” H1N1 virus are similar to those of influenza and of influenza-like illness in general. Symptoms include fever, cough, sore throat, body aches, headache, chills and fatigue. The 2009 outbreak has shown an increased percentage of patients reporting diarrhea and vomiting. The 2009 H1N1 virus is not zoonotic swine flu, as it is not transmitted from pigs to humans, but from person to person. The most common cause of death is respiratory failure. Other causes of death are pneumonia (leading to sepsis), high fever (leading to neurological problems), dehydration (from excessive vomiting and diarrhea), and electrolyte imbalance and kidney failure. Fatalities are more likely in young children and the elderly.

Influenza spreads between humans when infected people cough or sneeze, then other people breathe in the virus or touch something with the virus on it and then touch their own face. Swine flu cannot be spread by pork products, since the virus is not transmitted through food. The swine flu in humans is most contagious during the first five days of the illness, although some people, most commonly children, can remain contagious for up to ten days. Diagnosis can be made by sending a specimen, collected during the first five days, for analysis.

The 2009 flu pandemic vaccines are the set of influenza vaccines that have been developed to protect against the pandemic H1N1/09 virus. Two types of influenza vaccines are available: TIV (flu shot (injection) of trivalent (three strains; usually A/H1N1, A/H3N2, and B) inactivated (killed) vaccine) or LAIV (nasal spray (mist) of live attenuated influenza vaccine.). TIV works by putting into the bloodstream those parts of three strains of flu virus that the body uses to create antibodies; while LAIV works by inoculating the body with those same three strains, but in a modified form that cannot cause illness. LAIV is not recommended for individuals under age 2 or over age 49, but might be comparatively more effective among children over age two. Both these types of vaccine are usually produced by growing the virus in chicken eggs.

ADI Human influenza A IgG measures antibody is serum or plasma samples. We also have kits to anti-influenza IgG and IgM in human, human, rabbits, and chickens.

Related Kits

- 920-010-PAG Swine/Pig Anti-Influenza A virus IgG ELISA kit
- 920-030-PAA Swine/Pig Anti-Influenza A virus IgA ELISA kit
- 920-050-HAM Human Anti-Influenza A virus IgG ELISA kit
- 920-040-HAG Human Anti-Influenza A virus IgM ELISA kit
- 920-060-HAA Human Anti-Influenza A virus IgA ELISA kit
- 920-040-HAG-flr 110405A

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