

Product Specification Sheet

**Hemagglutinin-Influenza A Virus (H1N1) (A/New Caledonia/20/99) Protein and Antibodies**

Cat. # H1N1-01-A **Rabbit Anti-Hemagglutinin Infl. A Virus (H1N1) (A/New Caledonia/20/99) IgG**  
**SIZE:** 100 ul

Cat. # H1N1-01-C **Recombinant Hemagglutinin Infl. A Virus (H1N1) (A/New Caledonia/20/99) protein control or WB**  
**SIZE:** 100 ul

Influenza A (H1N1) virus is a subtype of influenza A virus and was the most common cause of human influenza (flu) in 2009. Some strains of H1N1 are endemic in humans and cause a small fraction of all influenza-like illness and a small fraction of all seasonal influenza. H1N1 strains caused a few percent of all human flu infections in 2004–2005. Other strains of H1N1 are endemic in pigs (swine influenza) and in birds (avian influenza). In June 2009, the World Health Organization declared the new strain of swine-origin H1N1 as a pandemic. This strain is often called swine flu by the public media. Swine influenza (also called swine flu, or pig flu) is an infection by any one of several types of swine influenza virus. Swine influenza virus (SIV) is any strain of the influenza family of viruses that is endemic in pigs. As of 2009, the known SIV strains include influenza C and the subtypes of influenza A known as H1N1, H1N2, H3N1, H3N2, and H2N3.

The Influenza A Virus is a globular particle about 100nm in diameter, sheathed in a lipid bilayer derived from the plasma membrane of its host. Studded in the lipid bilayer are two integral membrane proteins some 500 molecules of hemagglutinin ("H") and some 100 molecules of neuraminidase ("N"). Within the lipid bilayer are 3000 molecules of matrix protein and 8 pieces of RNA. Each of the 8 RNA molecules is associated with many copies of a nucleoprotein, several molecules of the three subunits of its RNA polymerase some "non-structural" protein molecules of uncertain function.

**Source of Antigen and Antibodies**

<b>Antigen</b>	Recombinant Full-Length H1N1 A/New Caledonia/20/99 (gene accession # AAP34324) is purified (>95%, mol wt ~75 kda) from 293 cell culture infected with H1N1 A/New Caledonia/20/99
<b>Ab Host/type</b>	Rabbit, Polyclonal IgG # H1N1-01-A supplied in PBS, pH 7.4, .1% Gelatin and 0.05% azide in liquid or powder (reconstitute in 100 ul water)
<b>2-Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>-ve control IgG</b>	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

**Recombinant Hemagglutinin Influenza A Virus (H1N1) (A/New Caledonia/20/99) protein control (~75 kda) for WB (cat # H1N1-01-C)** is supplied in denaturing SDS-PAGE sample buffer ready to load on gels. Store at -20oC. Heat at 95oC for 2-3 min prior to loading on gels (10 ul/lane). SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the

#H1N1-01-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. This preparation is intended for qualitative purpose and not to serve as standard of known concentration. Do not freeze, thaw, or heat repeatedly.

**Form & Storage of Antibodies/Peptide Control**

**Affinity pure IgG**

100 ug/100ul solution lyophilized powder  
**Reconstitute powder** in PBS at 1mg/ml

**Storage**

**Short-term:** unopened, undiluted liquid vials at -20oC and powder at 4oC or -20oC..

**Long-term:** at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Recommended Usage**

**Western Blotting** (1:500-1:2000 antibody using ECL technique). Recombinant protein control ~75 Kda.

**ELISA:** Control protein can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (1:1K-1:5K).

**Histochemistry & Immunofluorescence:** Not tested.

**Specificity & Cross-reactivity**

**Rabbit Antibodies react with Hemagglutinin** from Influenza A Virus (H1N1) (A/New Caledonia/20/99) strain but may also recognize other viral strains. Recombinant HA1 protein H1N1 from A/New Caledonia/20/99 and other strains are available for controls studies.

**General References:** Lee MS (2003) . Infect. Dis. 188 (9), 1362-1366;

\*This product is for In vitro research use only.

**Related material available from ADI**

Catalog#	ProdDescription
920-010-PAG	Swine/Pig Anti-Influenza A virus IgG ELISA kit
920-020-PAM	Swine/Pig Anti-Influenza A virus IgM ELISA kit
920-030-PAA	Swine/Pig Anti-Influenza A virus IgA ELISA kit
920-040-HAG	Human Anti-Influenza A virus IgG ELISA kit
920-050-HAM	Human Anti-Influenza A virus IgM ELISA kit
920-060-HAA	Human Anti-Influenza A virus IgA ELISA kit
920-100-AIV ELISA kit	Chicken Anti-Avian Influenza A virus (AIV) IgG ELISA kit
920-105-AIM IgM ELISA kit	Chicken Anti-Avian Influenza A virus (AIV) IgM ELISA kit
970-100-H1G (human/avian) IgG ELISA kit	Rabbit Anti-Influenza A Virus H1N1 (human/avian) IgG ELISA kit

H1N1-01-A

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**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)