



## Improved Production of Influenza Virus, Including H1N1, for Vaccine Manufacture

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Inventors: Yoshihiro Kawaoka, Taisuke Horimoto, Shin Murakami

**The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing a method and composition for improving production of vaccines against influenza viruses, including H1N1.**

### Overview

The H1N1 influenza virus, known as the “swine flu,” has been declared a pandemic. While this virus is less virulent than many circulating strains of flu virus, it has become the subject of significant public health efforts, including international stockpiling of vaccine. However, this virus is less amenable to high titer production than many of the more common influenza viruses, making vaccine manufacture challenging.

### The Invention

UW-Madison researchers have identified a single point mutation in the haemagglutinin (HA) gene of the H1N1 virus that enhances viral titer. Introducing the mutation into vaccine seed viruses could lead to higher titer production of the viruses, improving vaccine manufacture.

### Applications

- Production of H1N1 vaccine
- Production of vaccines against other viruses
- Viral mutagenesis studies
- Identification of other HA mutations that alter growth of influenza virus

### Key Benefits

- Significantly improves growth of influenza virus in cultured cells, including Vero cells
- Enhances manufacturing of influenza vaccines, including vaccines against the H1N1 strain
- Does not require helper virus

### Stage of Development

This mutation enhanced replication of H1N1 more than 1000 times in a cell line approved for human vaccine production.

### Additional Information

#### Related Technologies

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Wisconsin Alumni Research Foundation

| [info@warf.org](mailto:info@warf.org) | 608.960.9850

#### Related Intellectual Property

- [View Continuation Patent in PDF format.](#)
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#### Tech Fields

- [Therapeutics & Vaccines : Vaccines](#)

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