



## Title of Invention

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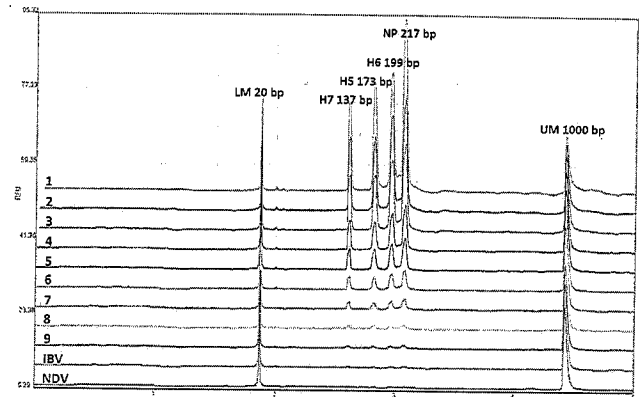
### Experience:

Please see website below.

<https://sites.google.com/view/wlclab>

### Market Needs:

The clade 2.3.4.4 H5 avian influenza virus has caused numbers of outbreaks in Taiwan so far. The H6 virus is ubiquitously existed in Taiwan for a long time. In recent years, Taiwan also faces the threat of H7 virus from China. Therefore, it is imperative to set up an immediate monitoring system for wild fowls and domestic fowls. The developed technology possesses multi-task property, high efficiency, high sensitivity and high specificity, which could meet the requirements of the market and make contribution to the pandemic control in Taiwan.



### Our Technology:

The NP gene of all avian influenza viruses and the HA gene of clade 2.3.4.4 H5 virus, H6 virus and H7 virus could be simultaneously detected using our designed primers for multiplex reverse transcription recombinase polymerase assay combined with capillary electrophoresis. The detection limit is only one copy number for each of the four genes, indicating the extremely high sensitivity. The whole detection time is only 1.5 hours. Our developed approach could meet the requirements for instant pandemic control in Taiwan.

### Strength:

The PCR machine, traditional plate electrophoresis device or imaging apparatus are all not needed in the approach. It does not need sophisticatedly designed probes as well. Since capillary electrophoresis machine is commonly applied in a lab, it could replace the expensive fluorescence machine. The approach substitutes PCR, traditional electrophoresis, sequencing and the alignment analysis, saving lots of procedures and time. It constructed a easy processing, high specificity and high sensitivity detection model, possessing the prominent strengths.

### Competing Products:

There have been no any competitive products in markets so far.

### Intellectual Properties:

We have 12-year experience, owing 5 related patents (US10,017,830 B2, US10,017,830 B2, ROC I2617810, ROC I531654, ROC I372784).

**Contact (do not need to fill out):**

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