

## Detection of Magnetic Field Concentrated Analytes in a Lateral Flow Capillary

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**Summary:** A lateral flow capillary devise to detect target analytes that are concentrated by a magnetic field

**Description:** This invention is of a method to detect targeted analytes. The method most often used now is Lateral Flow Chromatography (LFC), which has many drawbacks including, the need for extensive optimization, sensitivity, specificity, lack of quantitative data, and extensive component selection. This method uses Surface Enhanced Raman Spectroscopy (SERS) and antibodies specific to the targeted analyte. These antibodies are easily attached to beads (one specific for SERS and one for a nano-magnet). The method reports both quantitative and qualitative results in a rapid fashion.

## **Main Advantages of this Invention**

- Ability to receive quantitative and qualitative information quickly
- No need for the nitrocellulose membrane required for LFC
- More specific and sensitive than LFC
- Simpler than LFC

## **Potential Areas of Application**

- Virus and bacteria detection
- Medical testing
- Agriculture
- Home pregnancy tests

**ID Number:** 11011

Antiphage antibody

Membrane

Absorbing pad

Control line

Phage concentration

Detection membrane

Reporter release pad

**Intellectual Property Status:** US utility pending (application #13/992,547)

**Opportunity:** We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

## For more information contact:

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