Press release

Swine Flu – Fast and Reliable Isolation of the Viral RNA

Baesweiler, September 7th 2009. The growing amount of suspicious cases for swine flu in addition to the other daily samples forces diagnostic laboratories to react. They need a reliable, time saving solution to cope with a daily throughput of up to 500 additional samples per day. Besides the rising number of samples, the incoming sample material used for different diagnostic requests is very heterogeneous. Processing stool, plasma, swabs and urine in parallel is almost the only way to deal with the huge amount of daily samples. But this variety of sample materials makes it more or less impossible to automate the crucial step of nucleic acid isolation. However chemagen offers a very flexible solution to solve this problem – the chemagic Magnetic Separation Module I.

The chemagic Magnetic Separation Module I (chemagic MSM I) performs automated nucleic acid isolation within one hour. Viral RNA of 96 nasal swabs can be extracted in parallel. “We couldn’t cope with 500 additional samples per day without our chemagic MSM I.” says Dr. Andreas Lindauer, sYnlab Molecular Biology, Weiden, Germany.

chemagic Viral Kits: One for All

“We place stool suspensions, blood, plasma, serum and urine samples on a 96 well plate and isolate the nucleic acids with a generic chemagen protocol. That saves a lot of time. No cross contaminations occurred so far.” Dr. Michael Weizenegger, Labor Limbach, Heidelberg, Germany describes one of the main advantages of the chemagic MSM I: the ability to process various sample materials with one kit – the chemagic gDNA/Viral NA Kit special, which is dedicated to the use with the chemagic MSM I.

Highest Flexibility in Sample Volumes

Due to three chemagic Rod Heads – exchangeable within minutes – the chemagic MSM I is very flexible. Corresponding to standard well plates the chemagic MSM I can be equipped with a chemagic 12, 24 or 96 Rod Head. Thus sample volumes from 10 µl – 10 ml can be processed easily using only one instrument. The chemagic 96 Rod Head with 96 thin steel needles is destined for high throughput applications. Processing 96 samples with the typical volume of 200 µl to extract pathogen DNA and RNA takes only 60 minutes.

The chemagic Prepito

“Sometimes late in the afternoons we get a few urgent samples that we don’t want to process manually, in this case the chemagic Prepito is the perfect system. It can process up to 12 samples with the same efficiency as the chemagic MSM I.” says Dipl.-Biol. Christian Klos (sYnlab Weiden). This small benchtop solution facilitates NA isolation from 10 µ – 600 µl. The chemagic Prepito uses the same separation technology as the chemagic MSM I.

The chemagic Separation Technology

chemagen’s core competence is the development and production of magnetic particles for nucleic acid

isolation. These proprietary M-PVA Magnetic Beads have a high affinity to nucleic acids. Both chemagic isolation platforms use this unique separation principle: A strong electromagnet magnetizes steel needles of the chemagic Rod Heads, covered with disposable tips to avoid contamination. M-PVA Magnetic Beads are attracted by these magnetized needles. Due to their DNA/RNA binding capacity, the Magnetic Beads transport the nucleic acids from one vessel to another during the whole isolation process. Lysis, mixing, binding and elution are realized through the patented rotation of the needles when the magnet is off. This technology does not lead to DNA shearing and supports an efficient binding of nucleic acids to the beads.

New subsidiary in the United States

In July 2009 chemagen AG has founded a subsidiary in the USA. Based on several years of experience in the field of Human Genetics, HLA Typing, Blood Banking and Pathogen Diagnostics the customers of chemagen USA, Inc. will benefit from this knowledge. chemagen offers highly qualified technical support and never hesitates to offer a customized solution.

chemagen's Distribution Channels

chemagen distributes its products directly or through one of the 19 distributors all over the world. The entire list of chemagen distributors can be found at http://www.chemagen.com/distributors.html. Most partners decided for the chemagic automation to complete their portfolio offering solutions for human diagnostics. The extracted DNA/RNA is ready to use for many downstream applications such as HLA Typing, Real-Time PCR, Sequencing or Hybridisation Assays. chemagen is always looking for new distribution partners in countries that are yet not covered by their distribution network.

For further pictures and information visit http://www.chemagen.com.

About chemagen AG

chemagen is a key player in the field of automated nucleic acid isolation. The purification of DNA or viral DNA/RNA is facilitated through chemagen's proprietary M-PVA Magnetic Bead technology. chemagen's high performance instrument is the chemagic Magnetic Separation Module I (chemagic MSM I). It enables automated separation of nucleic acids from sample volumes between 10 µl – 10 ml. Available kit applications include sample materials such as blood, serum/plasma, tissue, saliva, buccal swabs, amniotic fluid or feces. With the chemagic Prepito, chemagen offers a benchtop walk-away instrument relying upon the proven separation process for up to 600 µl blood and 1 - 12 samples in parallel.

Outstanding robustness, minimal hands on time and fast automated applications translate to the highest throughput and flexibility of your laboratory workflow.

Find further information at **www.chemagen.com**

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Figures:

Fig. 1: The chemagic Magnetic Separation Module I. It uses magnetic beads for nucleic acid isolation from a huge variety of sample materials.

Fig. 2: Three different Features of the chemagic MSM I. The chemagic MSM I can be equipped with a chemagic 96 Rod Head for small volume applications and high throughput or with the chemagic 24 or 12 Rod Head for larger volumes.

Fig. 3: The chemagic Prepito. A small benchtop solution for automated nucleic acid isolation.

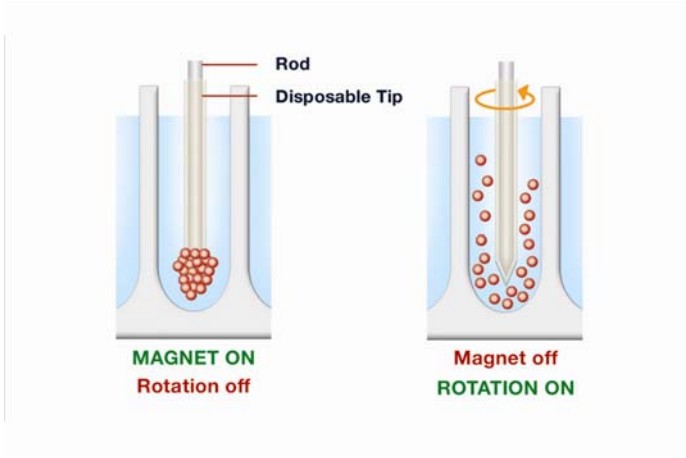

Fig. 4: The chemagic Separation Technology. When the electromagnet is on the magnetic beads bind the rod, whereas rough mixing is realized through rod rotation when the magnet is off.