Virinova technology

Creating a fast proprietary virus detection platform

Virus detection technology

- Separation based
  - The well established capillary electrophoresis technology is utilized to separate virus particles from all other bio-molecules in the sample
- Specific detection
  - Ultra-sensitive nucleic acid specific fluorescence dyes provide enhanced specificity and sensitivity
- Detection of all virus types
  - Unique combination of nucleic acid detection with separation of virus particles (based on the protein/lipoprotein surface)
  - Enables detection of all viruses including unknown viruses

Virus diagnostics

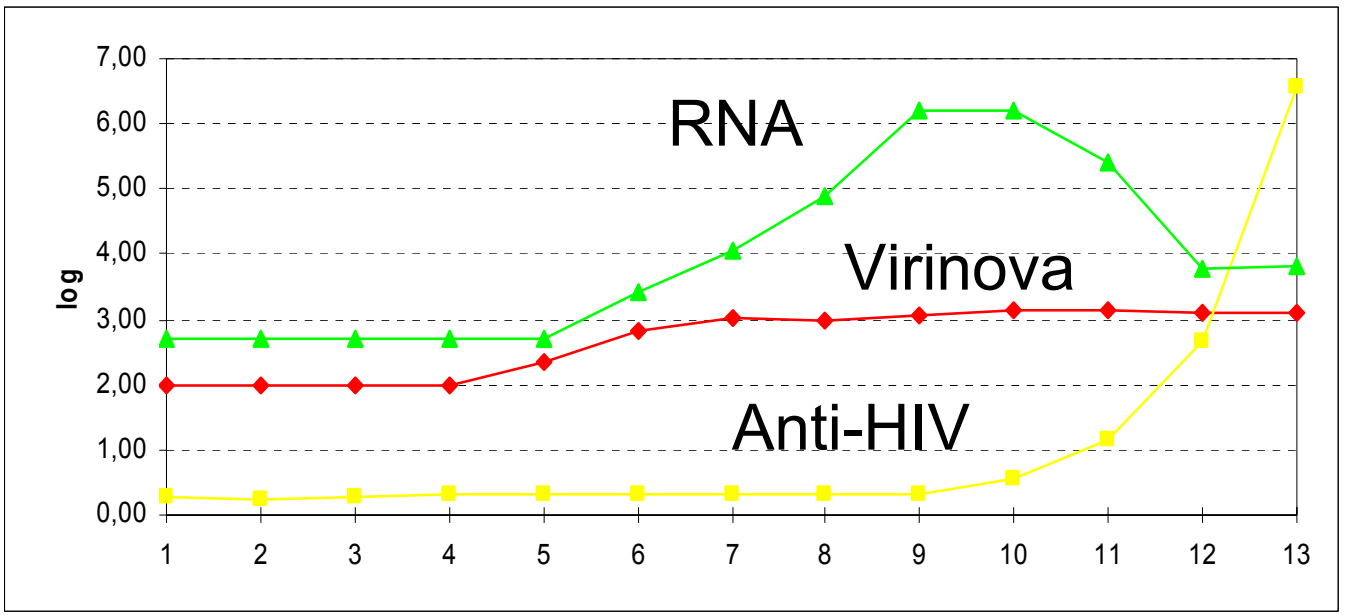
Demonstrating the generic application of the Virinova technology for the detection and quantitation of:

- Enveloped/ non-enveloped virus particles
- RNA/DNA virus particles

Successful Virus diagnostic for:

- Aids Virus (HIV)
- Hepatitis C (HCV)
- Hepatitis B (HBV)
- Herpes Simplex (HSV-1 and HSV-2)
- Parvo B19
- Paramyxo Virus
- Adeno virus
- Rhino viruses
- Cytomegalo virus (CMV)
- Parapox virus
- Foot and mouth disease virus
- Several plant viruses

Comparison of Virinova technolgy in monitoring of HIV seroconversion



RNA - using PCR

Anti HIV - using antibodies

Virinova technology detects HIV infection as early as PCR

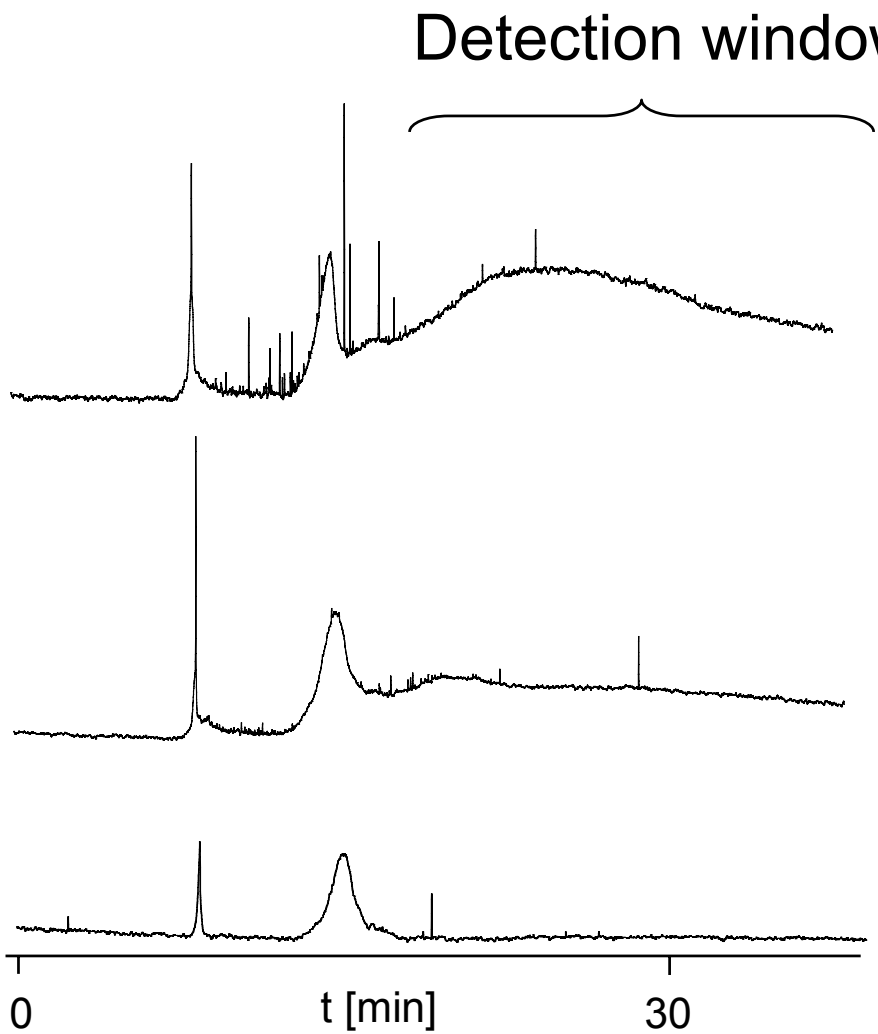
Monitoring of acute HCV infection demonstrates excellent correlation with disease progression

25 year old male

day 1
sick patient
Anti-HCV negative
Virinova positive

day 3
sick patient
Anti-HCV negative
Virinova positive

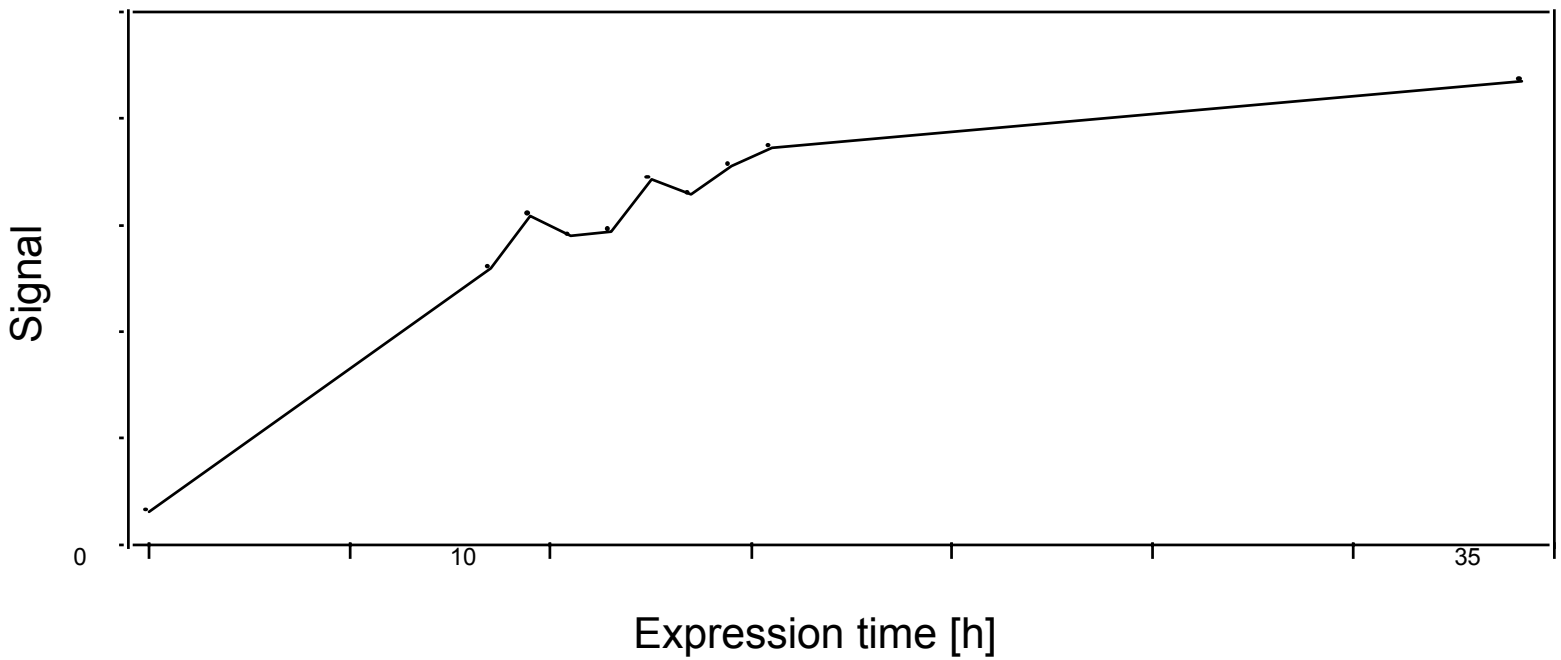
day 6
patient recovering
Anti-HCV positive
Virinova negative



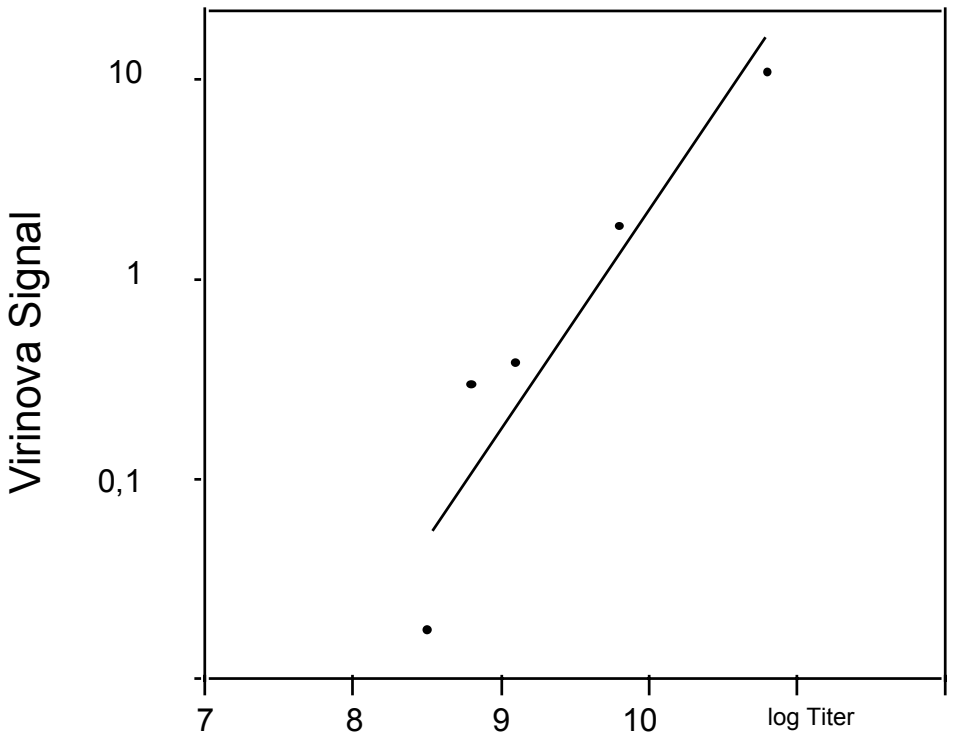
Process control

Validating the concept for the control of virus expression

Process control of virus expression in BHK suspension



Correlation of Virinova signal with biological assay for virus concentration



- Virinova's technology detects inactivated but structurally intact virus particles
- Virinova technology enables process control of vaccines beyond inactivation step

For more information

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