**PRODUCTS OVERVIEW**

- **DEEPCHEK® ASSAY** > **GENOTYPING**
- **SOFTWARE** > **ANALYSIS & INTERPRETATION**
- **ULTRAGENE ASSAY** > **VIRAL LOAD**

**TECHNOLOGY & CONCEPT**

- **VIRAL LOAD**
- **AMPLIFICATION**
- **SEQUENCING**
- **ANALYSIS & REPORTING**

**DEEPCHEK® ASSAYS AND SOFTWARE FOR HIV GENOTYPING**

**FEATURES**
- For SANGER & Next Generation Sequencing (NGS)
- Compatible with any Sanger or NGS platform
- CE-IVD software
- RUO Assays – ISO-9001 manufacturing
- Automated software workflow
- Genotyping
- Drug resistance interpretation
- Reporting
- Integration / LIS connectivity
- Services (customization, data import...)

**PERFORMANCES**
- 400 µL plasma/serum - >1000 cp/mL
- Protocols for low viral loads available
- Fully-automated bioinformatics pipeline

**ANALYTICAL SENSITIVITY**

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<thead>
<tr>
<th></th>
<th>1000 cp/mL</th>
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<tr>
<td></td>
<td>Neutral</td>
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**ANALYTICAL SPECIFICITY**

<table>
<thead>
<tr>
<th></th>
<th>All subtypes &amp; CRF</th>
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<tr>
<td></td>
<td>Neutral</td>
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**REPRODUCIBILITY**

<table>
<thead>
<tr>
<th></th>
<th>&gt;99%</th>
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**AVAILABLE SOON**
- Robot for workflow simplification

**CE-IVD of DeepChek® Assays**
DEEPCHEK®-HIV ASSAYS

GENOTYPING & DRUG RESISTANCE
- DeepChek®-HIV RT / PR Genotyping Assay (K-16-H2-RTPR24)
- DeepChek®-HIV INT Genotyping Assay (K-15-026H2-INT)

TROPISM DETERMINATION
- DeepChek®-HIV V3 Loop / Tropism Assay (Available soon)

Extraction
- Extraction kit*

Amplification
- Thermocycler
- RT-PCR Reagents

Sequencing
- Library prep kit
- Sequencer

Data analysis
- Downstream analysis software

SANGER
- Extraction 45min
- Single Round Amplification 3h30
- Revelation 30min
- Purification 45min
- Sequencing 12h
- Data analysis 10min
- TAT ~18 hours HOT ~1.5 hours

NGS**
- Extraction 45min
- Single Round Amplification 3h30
- Revelation 30min
- Library Preparation 3h30
- Sequencing 24h
- Data analysis 2h
- TAT ~24 hours HOT ~4 hours

* Several protocols available
** Works on all NGS platforms (from 24 to 48 samples per run)
VIROSCORE®-HIV & DEEPCHEK®-HIV SOFTWARE

- RT, PROT, INT, GP120/V3, GP41
- Batch processing
- Inputs: AB1, FASTA, FASTQ, BAM...
- Traces assembling
- Manual or automated base calling
- Variant calling
- Genotyping/Subtyping

Input

Analyse

DeePChek®

NGS

ViroScore®

Sanger

Reads alignment

Variant calling

Variant validation

Reads subtyping

Analysis

Interpretation

Drug resistance

Disease prognosis

References

Reporting

Reporting

Data mining

IT services

Storage

Regular updates

Integration (LIS, HIS)

Local installation

Cloud access

- Walk-away station: from chromatogram to genotyping report in <1min/sample (for Sanger)
- Drug resistance (HIVdb, ANRS, geno2pheno, ...)
- Reporting (routine diagnostics and research)
- Integration with Laboratory or Hospital Information Systems (LIS / HIS)
- Available through the Cloud or local servers

- ▪ RT, PROT, INT, GP120/V3, GP41
- ▪ Batch processing
- ▪ Inputs: AB1, FASTA, FASTQ, BAM...
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contact@ablsa.com
http://www.ablsa.com
ULTRAGENE-HIV

- qPCR in Disease Management
  - Real-Time PCR allows for direct detection of the amount of HIV RNA or HIV proviral DNA in the patient samples.

  ![qPCR Workflow Diagram]

  - **Analytical Sensitivity**: 20 cp/mL
  - **Analytical Specificity**: All subtypes & CRF
  - **Reproducibility**: >99%

  Efficiency

  - Reflex Genotyping Testing

  - Amplicons ready for sequencing:
    - Genotyping, drug resistance...
    - Time efficiency
    - Cost efficiency
    - Sample volume efficiency

Positive => Viral load > 20 cp/mL

Negative => Viral load not detectable

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CONTACT INFORMATION

- Advanced Biological Laboratories S.A.
  - 17, rue des Jardiniers, L-1835 Luxembourg
  - contact@ablisa.com

- http://www.ablsa.com
  - TEL: (+352) 26 38 96 761
  - FAX: (+352) 26 38 96 76 31

ORDERING INFORMATION

- HIV Assays
  - DeepChek®-HIV RT / PR Genotyping Assay (RUO) K-16-H2-RTPR24
  - DeepChek®-HIV V3 Loop/Tropism Assay (RUO) To be determined
  - UltraGene®-HIV Assay (RUO) To be determined

- HIV Software
  - DeepChek®-HIV Software (CE-IVD) S-12-023 (HUS)
  - ViroScore®-HIV / ViroScore®-HIV Premium Software (CE-IVD) S-09-014 (VSH)

ALSO AVAILABLE: HEP, HBV

AVAILABLE SOON: CMV, Influenza, Herpes, HPV, Tuberculosis, Microbiome

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