DeepChek® Assay HIV-1
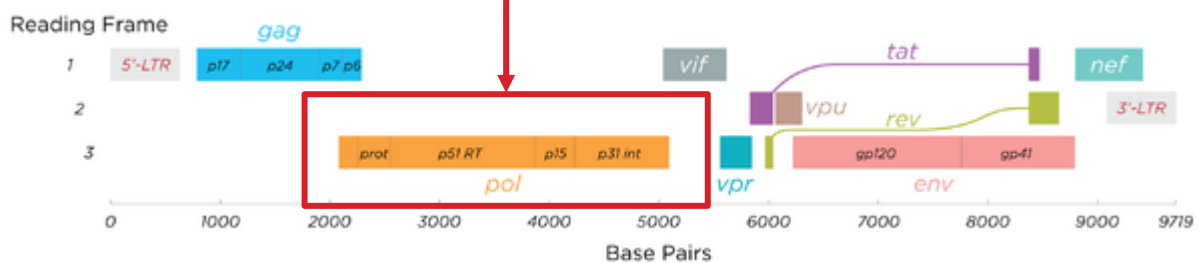## Full PR/RT/INT
Drug Resistance
Genotyping of the Full HIV-1 *pol* Gene with PR+RT+INT Regions in One Single PCR Reaction (Single 3,7kb Amplicon)

ABL Diagnostics is pleased to announce the availability of a new product intended to be used for **HIV-1 Genotyping** through **Next Generation Sequencing (NGS)**

HIV-1 NGS Genotyping through a <u>Single</u> PCR reaction

Detection of resistance associated mutations in the <u>full</u> *reverse transcriptase*, *protease* and *integrase* regions

Sample Type
- Plasma
- Serum
- Whole blood (**proviral DNA**)
- DBS

Performances
- Sequencing of <u>whole *pol* gene</u> including the 3 genomics target regions <u>in a single PCR reaction</u>
  - Protease
  - Reverse Transcriptase
  - Integrase
- Single amplicon of ~3,7kb
- RT-PCR ~2h25 in a single tube
- Library preparation within 5h
- Total turnaround (from extraction to report): 18h
- Limited Hands-on time
- LoD:
  - 1000 copies/mL through one single PCR
  - Between 100 – 1000 copies/mL (~50% success rate)
  - Below 50 copies/mL with concentration process (protocols to be provided)
- Nested PCR primers included in the kit to rescue low viral load samples
- Specificity : designed to be pangenotypic

Highest Versatility & Flexibility
- Many extraction systems
- MiSeq, iSeq-100, MiniSeq; NextSeq
- S5, PGM, MinIon, MGI
- SANGER sequencing under validation

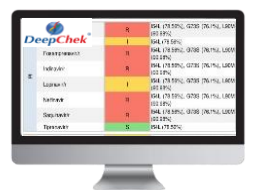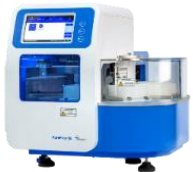## Validated Pooling with Other Tests & Applications
- HIV-1: gp120, gag, Whole Genome
- HCV
- HBV
- CMV
- HSV
- 16s RNA
- 18s RNA
- Tuberculosis
- Influenza
- …

Data analysis through DeepChek®-HIV
- Web-based
- Software & database
- Local or Cloud (**+HDS**) hosting
- Unlimited user accounts
- Unlimited analyses

- Genotyping (per sample & cumulative)
- Subtyping
- Virtual-phenotyping
- Drug resistance
  - NRTIs
  - NNRTIs
  - PIs
  - IIs
- Up-to-date guidelines
  - HIVdb/Stanford
  - ANRS
  - Rega
  - Geno2pheno
  - HIV Grade
  - RIS
  - RenaGeno
- Tropism
- Reporting & labelling

Turnaround: 18h

Extraction ▶ Amplification ▶ NGS Library Preparation ▶ Sequencing ▶ Data Analysis

RELATED PRODUCT

- DeepChek® Assay HIV-1 Full PR/RT/INT Drug Resistance V1.x (RUO)   198A24

ALSO AVAILABLE FOR HIV GENOTYPING

- DeepChek® Assay PR / RT Genotyping and Drug Resistance V1 (CE IVD)   121A24
- DeepChek® Assay INT Genotyping and Drug Resistance V1 (CE IVD)   122A24
- DeepChek® Assay Whole Genome HIV-1 Genotyping V1 (CE IVD)   170A24

- DeepChek® Assay PR / RT Genotyping and Drug Resistance V1 (RUO)   101B24
- DeepChek® Assay INT Genotyping and Drug Resistance V1 (RUO)   102C24
- DeepChek® Assay Whole Genome HIV-1 Genotyping V1 (RUO)   170A24_RUO
- DeepChek® Assay V3 LOOP / TROPISM V1 (RUO)   103A24
- DeepChek® Assay GP41/GP120 Genotyping and Drug Resistance V1 (RUO)   194A24
- DeepChek® Assay GAG Genotyping and Drug Resistance V1 (RUO)   195A24

- DeepChek® HIV Software (CE-IVD)   S-12-023 (HL)
- ViroScore-HIV Annual Software License (CE IVD)   S-09-014
- M-type hosting (HDS HealthCare data hosting)   O-22-HDS-M