

DeepChek® Assays Fully Validated on the Applied Biosystems SeqStudio Genetic Analyzer

ANNOUNCEMENT



ABL is pleased to announce the validation of its **DeepChek® Line of Assays** on the Applied Biosystems SeqStudio Genetic Analyzer



DEEPCHEK® ASSAYS*

Sequencing-based genotyping assays for microbiology and virology applications



HIV

HBV

HCV

TB

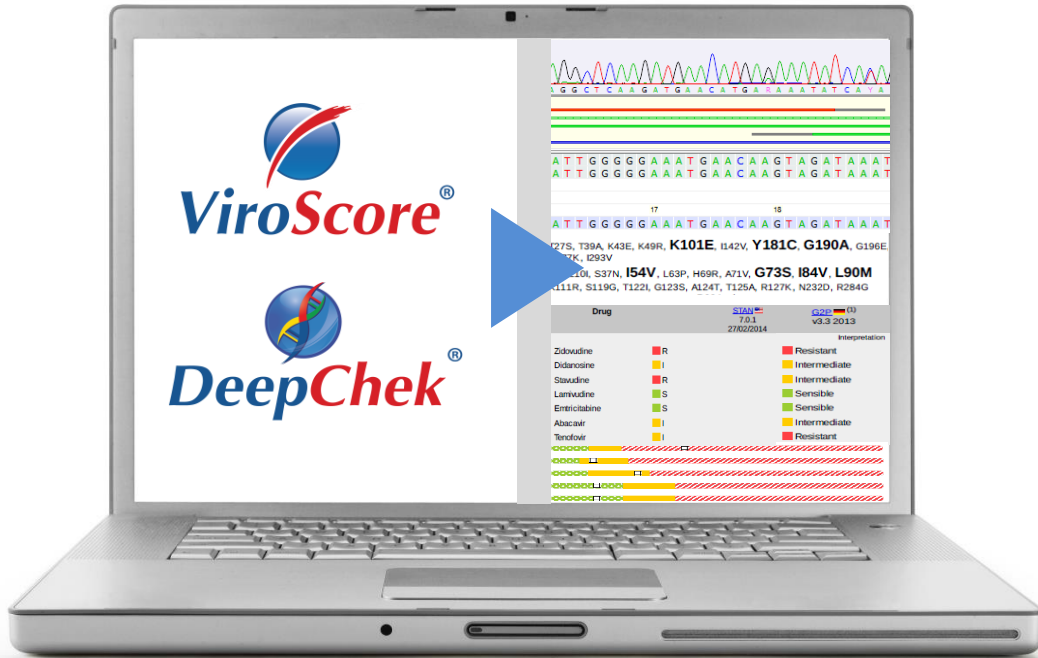


* Also validated on other Sanger or NGS platforms (protocols available for MiSeq, MiniSeq, iSeq-100, S5, PGM, ABL,...)

EXAMPLES OF RESULTS



AN EMBEDDED CHROMATOGRAM EDITOR



HIV

HBV

HCV

ABI Applied Biosystems

Phylogenetic Interpretation

Analysis of HIV-1 RT
 Patient name: [redacted]
 Date of sample: 2013-09-15
 Date of sequencing: 2013-09-15

Phylogenetic Interpretation (GenSeq v3.3.0.10)

Class	Drug	2013-09-15	2013-09-15
MTR	Zidovudine	R	Resistant
	Stavudine	R	Intermediate
	Lamivudine	S	Sensible
	Emtricitabine	S	Sensible
	Abacavir	I	Intermediate
	Tenofovir	I	Intermediate
	Didanosine	R	Resistant
NRTI	Efavirenz	R	Resistant
	Rilpivirine	R	Resistant
	Islatravir	R	Resistant
	Elvitegravir	R	Resistant
PI	Atazanavir	R	Resistant
	Saquinavir	R	Resistant
	Darunavir	R	Resistant
	Ritonavir	R	Resistant
I	Maraviroc	S	Sensible
	Maraviroc	S	Sensible

SeqHepB Hepatitis B Viral Genome Analysis

Generation Date: 03/04/2017
 Generation Time: 08:31:31
 Software version: 3.0
 Expert system version: 3.1
 Algorithms version: SeqHepB 8 (November 2016)

Genomic variations detection

Substitutions: (Clinically significant substitutions highlighted in bold/red)

Reverse Transcriptase: **rT54L**, rE129K, rY124K, rM138L, rE139V, rE139V, **rV172L**, **rL180M**

HCV Surface Antigen: **rS123L**, rS124L, rP127L, rE134D, rF138L, rM145L, rS179L, rK212F

Drug resistance

Antiviral agent susceptibility	Resistance Associated Mutations
Acyclovir	Sensible
Concavir	Resistant (rV172L, rL180M, rM138L)
Lamivudine	Resistant (rV172L, rL180M, rM138L)
Telbivudine	Resistant (rV172L, rL180M, rM138L)
Tenofovir	Sensible

Risk Level
 Risk Level: Advanced Liver Disease
 Risk Level Associated Mutations: rV172L, rL180M, rM138L

DeepChek[®] HCV Clinical Genotyping report

DeepChek[®]-HCV analysis summary

Patient Sample Information

Patient ID: [redacted]
 Sample ID: [redacted]
 Sample date: [redacted]

Genotyping

RT Reverse Transcriptase (Sensitivity: 100%)
 HCV NS5A Surface Antigen (Sensitivity: 100%)

DeepChek[®]-HCV Mutation Analysis

HCV NS5A mutations

Q189R, F38L, V39L, W43K, R57Y, E580E, E581V, I584V, E593D, E594D, M596L, A597V, G599A, A599L, R599L, V599L, Y599L, P597L, S598P, L599F, N599D, S599P, G599V, P599L, Y599L, Y599L, Y599L

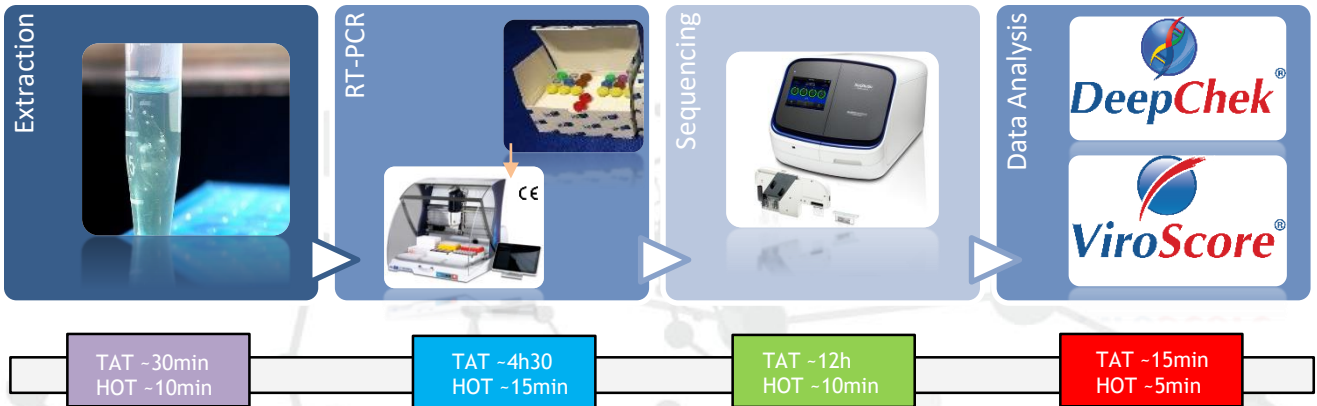
Subtype 1a (JF609006) was used as the reference sequence for the alignment.
 Mutations of interest based on HCV 2013 (major and minor mutations) (2013-01-01)

DeepChek[®]-HCV Drug Resistance Determination

HCV Phosphoprotease Inhibitors

Algorithm	Sanger based sequencing
GenScript	NA
Interventional	NA
Antiviral Society	NA
GenScript	NA
Interventional	NA
Antiviral Society	NA
GenScript	NA
Interventional	NA
Antiviral Society	NA

THE WORKFLOW



TAT -17h
HOT -40min

HOT: Hands-on time
TAT: Turnaround time
* For 24 samples

Terms and Conditions:

Advanced Biological Laboratories terms and conditions apply. **For Research Use Only. Not for use in diagnostic procedures.**

