

# Vela Diagnostics' ViroKey & Sentosa® FLEX for NGS and qPCR



**One Instrument. Endless Possibilities.**  
Introducing workflow automation and flexibility  
using *Sentosa*® SX101

# ViroKey SQ FLEX Solutions for Next-Generation Sequencing

Flexibility for Virology. Combine up to 4 assays in 1 NGS run. 4h hands-on time from sample to result.



## Cost-Saving

- Allows multi-assay testing in a single run
- Reuse of reagents with no wastage
- Reagents stable for up to 10 freeze-thaw cycles
- Decrease turn-around & hands-on time
- Cost efficient implementation of low volume assays

## Assay Compatibility



- HIV Genotyping & Resistance\*
- HCV Genotyping & Resistance\*
- CMV Genotyping & Resistance\*
- HBV Genotyping & Resistance\*

## Targets

HIV: Reverse Transcriptase, Protease & Integrase gene regions, Subtypes A-K

HCV: NS5B, NS3A, NS5A; Genotyping for 1a, 1b, 2-6, Mutations for 1a, 1b, 3

CMV: UL54, UL97, UL56, UL51, UL27, UL 89

HBV: HBV Polymerase gene, Basal Core Promoter (BCP), Pre-core (pre-C), Genotypes: B, C, D, E, F, G and H

## Workflow Efficiency

- No batching of samples required
- Able to extract up to 15 samples per run
- Automated validity check of tube and kit barcodes
- Automated data analysis and quality reporting, pathology- and drug resistance interpretation report
- System Control for quality and performance check
- Turn-around time: 2.5 days
- Hands-on time: 4 h

## Assay Selection Flexibility

- Freedom to run up to 4 assays in one run
- Genotype and resistance information in a single test

## Sample Types

- 730 µl Plasma for HIV, HCV, HBV, CMV
- 730 µl Serum for HCV, HBV

## Ordering Information

| Product Name                                  | Item Number |
|---|-------------|
| ViroKey SQ FLEX HIV Primer Set (96)           | 300819      |
| ViroKey SQ FLEX HCV Primer Set (96)           | 300820      |
| ViroKey SQ FLEX HBV Primer Set (96)           | 300821      |
| ViroKey SQ FLEX CMV Primer Set (96)           | 300822      |
| ViroKey SQ FLEX Library Prep Reagents (4x16)  | 300823      |
| Sentosa® SQ Virus Testing Solutions (4x24)    | 300775      |
| Sentosa® SX Virus Total Nucleic Acid Plus Kit | 300155      |

\*RUO: For research use only. Not for use in diagnostic procedures.

## Sentosa® FLEX Solutions for qPCR

Flexibility for Immunosuppression Testing. Combine up to 4 assays in 1 PCR run. Automated from sample to result.



### Cost-Saving

- Re-use of reagents (no wastage & batch independent)
- Reagents stable for up to 10 freeze-thaw cycles
- Allows multi-assay testing in a single run, reducing consumables and reagent wastage without batch dependence

### Workflow Efficiency

- No batching of samples required
- Able to extract up to 46 clinical samples per run
- Automated validity check of tube and kit barcodes
- Automated data analysis and reporting
- Combine different sample materials in one run

### Assay Selection Flexibility

- Freedom to assign up to 4 tests for each eluate
- Obtain up to 64 results from 4 tests in a single run

### Assay Compatibility



- CMV Quant
- BKV Quant
- EBV Quant
- HSV1/2 Quant
- VZV Quant
- HHV6 Quant

### Additional Controls Set Available

- Flexible batch sizes of 1 up to 72 reactions
- Supplementary 8x3 Controls Set containing 8 Positive Controls, 8 Negative Controls & 8 Extraction Controls available to match users' varying needs

### Validated Sample Types

- Plasma
- Whole Blood
- Serum
- Urine
- Swabs
- CSF

## Ordering Information

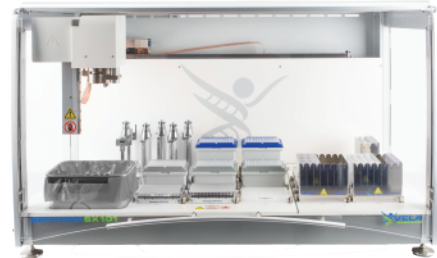
| Product Name                                  | Item Number for Pack Size 4x24 | Item Number for Pack Size 4x48 |
|---|--------------------------------|--------------------------------|
| Sentosa® SA CMV Quantitative PCR Test         | 300062                         | 300625                         |
| Sentosa® SA EBV Quantitative PCR Test         | 300106                         | 300627                         |
| Sentosa® SA VZV Quantitative PCR Test         | 300081                         | 300675                         |
| Sentosa® SA HSV 1/2 Quantitative PCR Test     | 300233                         | 300671                         |
| Sentosa® SA BKV Quantitative PCR Test         | 300088                         | 300636                         |
| Sentosa® SA HHV6 Quantitative PCR Test        | 300184                         | 300673                         |
| Sentosa® SX Virus Total Nucleic Acid Kit v2.0 | 300042                         | N/A                            |
| Sentosa® SX Whole Blood gDNA Kit              | 300252                         | N/A                            |
| Sentosa® SX FLExtraction Kit (96)             | 300747                         |                                |

Visit [www.veladx.com](http://www.veladx.com) for Ordering Information of Quantitation Standards and Controls Set IVD: For *in-vitro* diagnostics use. Not for distribution in US.

## The ViroKey Principle

### Integrated Workflow Solution for PCR and NGS diagnostics pathways

The FLEX solutions offer the flexibility to run up to 4 assays in one run. Together with the reusable assay reagents, ViroKey and Sentosa® FLEX makes testing more efficient and potentially reduces the time to result and allows more parameters to be simultaneously handled on one automated platform.



### Real-Time PCR Workflow

In the PCR workflow, the Sentosa® SX101 effortlessly performs sample extraction and proceeds to set-up samples in the Rotor-Disc 72 or downstream real-time PCR.

| Features                                   | Specifications                                    |
|--|---|
| Throughput                                 | Up to 72 reactions/run (Up to 288 reactions/day*) |
| Time to result                             | ~ 4 hours/run                                     |
| Runs/day                                   | 4 (last run with PCR o/n <sup>^</sup> )           |
| Assay combinations                         | 1 - 4 assays/run                                  |
| Open channel capability                    | Yes   |
| Primary tube handling capability (non-IVD) | Yes   |
| Regulatory Status                          | CE-IVD  |

\*Based on 8-hour shift and assay dependent  
<sup>^</sup> o/n= overnight

### Next-Generation Sequencing (NGS) Workflow

In the NGS workflow, the Sentosa® SX101 executes sample extraction and NGS library preparation with ease, reducing technician hands-on time.

| Features                     | Specifications       |
|------------------------------|----------------------|
| Throughput (assay dependent) | Up to 15 samples/run |
| Time to result               | ~ 2.5 days           |
| Hands-on time                | 4 hours              |
| Assay combinations           | 1 - 4 assays/run     |
| Open channel capability      | Yes                  |
| Regulatory Status            | RUO                  |

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 RUO: For research use only. Not for use in diagnostic procedures.  
 Inclusive of all requisite licenses.

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