## **EliDNA QBT NGS dsDNA Quantification Assays**

The EliDNA NGS dsDNA assay kits are specifically designed for easy and accurate quantification of dsDNA amplicons. Both kits are highly selective for dsDNA over RNA, and offer advantages in stability, linear dynamic range, and sensitivity over other traditional of DNA quantification methods.

The assays contain concentrated quantification reagent, dilution buffer, and pre-diluted dsDNA standards. Simply dilute the reagent using provided buffer, add your sample (any volume between  $1 \mu$ l and  $20 \,\mu$ l is acceptable), and read the fluorescence using a fluorescence plate reader or fluorometer. The assay is well tolerated to common contaminants such as proteins, salts, solvents, detergents, or free nucleotides. The assay can be adapted for use in microplates, tubes or cuvettes. Kits are designed in an "Add-and-Read" format to simplify DNA quantification and speed up your workflow.

The NGS dsDNA assays are offered in high sensitivity and broad range formats: The EliDNA QBT NGS dsDNA Assay Kit HS can be used to measure dsDNA concentrations between 1 ng/mL and 500 ng/mL, and the EliDNA QBT NGS dsDNA Assay Kit BR can be used to measure dsDNA concentration between 100 ng/mL and 5 000 ng/mL.

| Cat. No.                      | Product name                         | Sensitivity | Unit Size                |  |
|-------------------------------|--------------------------------------|-------------|--------------------------|--|
| ED-QBT15-200<br>ED-QBT15-500  | EliDNA QBT NGS dsDNA<br>Assay Kit HS | 0.2–100 ng  | 200 assays<br>500 assays |  |
| ED-QBT16-200<br>ED-QBT16-500  | EliDNA QBT NGS dsDNA<br>Assay Kit BR | 20–1 000 ng | 200 assays<br>500 assays |  |
| ED-QBT16-1000                 | EliDNA QBT Assay Tubes               | N/A         | 1 000 tubes              |  |
| ▲ Sensitivity per 200ul assay |                                      |             |                          |  |

Both assays are ideal for dsDNA quantification of DNA samples for construction of amplicon libraries, NGS sequencing and NGS library quantification.

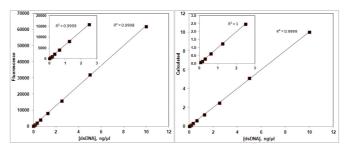
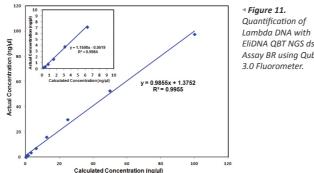


Figure 10. Left: Quantification of dsDNA with EliDNA QBT NGS dsDNA Assay Kit HS using fluorescence plate reader. Right: Quantification of dsDNA with EliDNA QBT NGS dsDNA Assay Kit HS using Qubit® Fluorometer



EliDNA QBT NGS dsDNA Assay BR using Qubit®

|           | Qubit® d | sDNA HS | EliDNA QBT NGS o | IsDNA Assay Kit HS | Qubit <sup>®</sup> d | SDNA BR | EliDNA QBT NGS o | IsDNA Assay Kit BR |
|-----------|----------|---------|------------------|--------------------|----------------------|---------|------------------|--------------------|
| Sample #1 | 12.5     | 12.6    | 11.9             | 11.8               | 10.7                 | 10.2    | 10.2             | 10.5               |
| Sample #2 | 12.7     | 12.7    | 11.5             | 11.9               | 11.3                 | 11.1    | 9.68             | 9.52               |
| Sample #3 | 29.2     | 28.4    | 24.5             | 24.8               | 25.2                 | 24.6    | 23.6             | 23.2               |
| Sample #4 | 37.0     | 36.6    | 30.8             | 31.2               | 30.6                 | 29.8    | 32.2             | 32.0               |
| Sample #5 | 51.8     | 51.8    | 43.4             | 44.2               | 45.6                 | 44.2    | 47.0             | 47.2               |
| Sample #6 | 17.7     | 17.6    | 15.9             | 15.7               | 14.6                 | 14.3    | 16.1             | 15.8               |



### We are also offering assay microtubes 0.5 ml, 1000 pcs EliDNA QBT Assay Tubes (ED-QBT16-1000)

Assay tubes are 500  $\mu$ L thin-walled polypropylene tubes for use with DeNovix, Qubit and Promega Fluorometers. 1000 tubes per package.



# **The EliDNA QBT QUANTIFICATION KITS**

### NEXT GENERATION OF NUCLEIC ACID QUANTIFICATION

#### Outstanding accuracy, sensitivity, and specificity

The Elisabeth Pharmacon company has developed "EliDNA concentrations in the presence of common contaminants, QBT" kits for DNA or RNA quantification, which allow precise including free nucleotides, protein, detergents and salts. measurement of DNA or RNA in samples across a wide Accurate quantification of purified DNA samples is a standard range of concentrations. Unlike absorbance-based nucleic nucleic acid research workflow, providing confidence for acid quantification, the fluorescence-based DNA or RNA downstream applications such as Next Generation Sequencing, measurement is highly sensitive and selective for DNA or RNA. PCR, cloning, and DNA transfections. It also provides more accurate measurement of DNA or RNA



- Higher sensitivity 100 times more sensitive than absorbance assays e.g. NanoDrop, Denovix
- Broad dynamic range Detection range with over four orders of magnitude
- Instrument compatibility Assay can be performed using fluorescence plate reader or fluorometer such as Qubit, Quantus and other
- Cost effective Lower replacement cost, good alternative to Qubit, Biotium or other kits
- More accurate Unaffected by proteins and free nucleotides in sample
- Easy to use Mix-and-read format

| ISOLATE  | QUANTIFY   | ASSAY  |
|--|--|--|
| DNA<br>samples<br>• Cells<br>• Tissue<br>• Swabs<br>• FFPE | EliDNA QBT<br>Quantification<br>• High sensitivity<br>• Great selectivity<br>• Simple workflow | Downstream<br>assays<br>• Next Gen<br>Sequencing<br>• PCR<br>• Cloning<br>• Transfection |



**ELISABETH PHARMACON** 

ROKYCANOVA 4437/5, BRNO-ŽIDENICE CZECH REPUBLIC | +420 542 213 851 www.elisabeth.cz

### **ELISABETH PHARMACON GROUP**

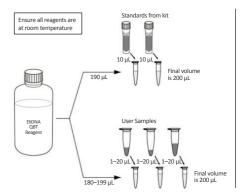
A Figure 1. Nucleic acid research workflow





### SIMPLE ASSAY WORKFLOW

EliDNA kits are designed as a "Mix-and-read" format. Simply mix the EliDNA QBT reagent with standards or clinical samples, vortex assay tubes for 2–3 seconds and incubate at room temperature for 2 min. Your samples are ready to be quantified using Qubit™ or Quantus fluorometer.

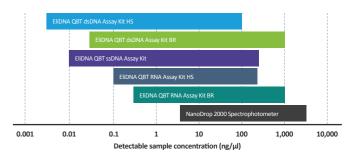


/ortex all assay tubes for 2–3 second Incubate at room temperature for Read tubes in Qubit<sup>®</sup> Fluoror



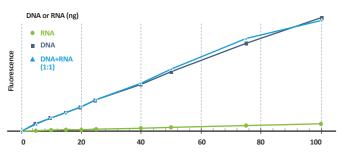
▲ Figure 2. The EliDNA OBT Assay workflow

In addition, the EliDNA QBT Assay Kits provide higher sensitivity than absorbance-based quantification methods, such as NanoDrop.



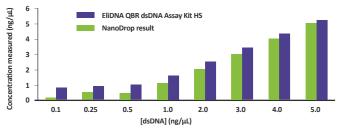
▲ Figure 3. Improved sensitivity with EliDNA QBT DNA/RNA Assay Kits

Additionally the EliDNA QBT Assay Kits exhibit excellent selectivity for DNA, even in the presence of an equal mass of RNA.



▲ Figure 4. Selectivity for dsDNA using EliDNA QBT dsDNA Assay Kit HS in the presence of an equal mass of RNA.

EliDNA QBT quantification kits show superior accuracy for detecting dsDNA compared with NanoDrop, especially at relatively low DNA concentrations.



▲ Figure 5. Comparison of accuracy readings between the EliDNA QBT dsDNA Assay Kit HS and NanoDrop.

### PRODUCT OVERVIEW OF EliDNA QBT ASSAYS

| Cat. No.      | Product name           | Sensitivity | Unit Size    |
|---------------|------------------------|-------------|--------------|
| ED-QBT10-200  | EliDNA QBT dsDNA       | 0.2–100 ng  | 200 assays   |
| ED-QBT10-1000 | Assay Kit HS           |             | 1 000 assays |
| ED-QBT11-200  | EliDNA QBT dsDNA       | 2–1 000 ng  | 200 assays   |
| ED-QBT11-1000 | Assay Kit BR           |             | 1 000 assays |
| ED-QBT12-200  | EliDNA QBT ssDNA       | 1–200 ng    | 200 assays   |
| ED-QBT12-1000 | Assay Kit              |             | 1 000 assays |
| ED-QBT13-200  | EliDNA QBT RNA         | 5–100 ng    | 200 assays   |
| ED-QBT13-1000 | Assay Kit HS           |             | 1 000 assays |
| ED-QBT14-200  | EliDNA QBT RNA         | 20–1 000 ng | 200 assays   |
| ED-QBT14-1000 | Assay Kit BR           |             | 1 000 assays |
| ED-QBT15-200  | EliDNA QBT NGS dsDNA   | 0.2–100 ng  | 200 assays   |
| ED-QBT15-500  | Assay Kit HS           |             | 500 assays   |
| ED-QBT16-200  | EliDNA QBT NGS dsDNA   | 20–1 000 ng | 200 assays   |
| ED-QBT16-500  | Assay Kit BR           |             | 500 assays   |
| ED-QBT16-1000 | EliDNA QBT Assay Tubes | N/A         | 1 000 tubes  |

## EliDNA QBT dsDNA Quantification Assays

The EliDNA QBT dsDNA quantification kits are designed specifically for easy and accurate quantification of dsDNA. Both kits are highly selective for dsDNA over RNA, and offer advantages in stability, linear dynamic range, and sensitivity over other traditional methods of DNA quantification.

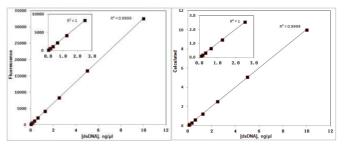
The assays contain concentrated quantification reagent, dilution buffer, and pre-diluted dsDNA standards. Simply dilute the reagent using provided buffer, add your sample (any volume between 1 µl and 20 µl is acceptable), and read the fluorescence using a fluorescence plate reader or fluorometer. The assay is well tolerated to common contaminants such as proteins, salts, solvents, detergents, or free nucleotides. The assay can be adapted for use in microplates, tubes or cuvettes. Kits are designed in an "Add-and-Read" format to simplify DNA quantification and speed up your workflow.

The dsDNA assays are offered in high sensitivity and broad range formats: the EliDNA QBT dsDNA Assay Kit HS can be used to measure dsDNA concentrations between 1 ng/mL and 500 ng/mL and the EliDNA QBT dsDNA Assay Kit BR can be used to measure dsDNA concentration between 10 ng/mL and 5 000 ng/mL.

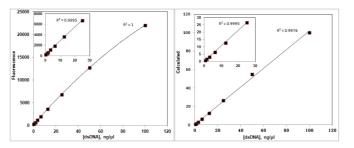
| Cat. No.      | Product name           | Sensitivity | Unit Size    |
|---------------|------------------------|-------------|--------------|
| ED-QBT10-200  | EliDNA QBT dsDNA       | 0.2–100 ng  | 200 assays   |
| ED-QBT10-1000 | Assay Kit HS           |             | 1 000 assays |
| ED-QBT11-200  | EliDNA QBT dsDNA       | 2–1 000 ng  | 200 assays   |
| ED-QBT11-1000 | Assay Kit BR           |             | 1 000 assays |
| ED-QBT16-1000 | EliDNA QBT Assay Tubes | N/A         | 1 000 tubes  |

▲ Sensitivity per 200ul assay

Both assays are ideal for dsDNA quantification of PCR products, viral DNA and samples for subcloning and Next Gen Sequencing, isolated genomic and DNA miniprep samples.



▲ Figure 6. Left: Quantification of dsDNA with EliDNA QBT dsDNA Assay Kit HS using fluorescence plate reader. Right: Quantification of dsDNA with EliDNA QBT dsDNA Assay Kit HS using Qubit<sup>®</sup> Fluorometer.



▲ Figure 7. Left: Quantification of dsDNA with EliDNA QBT dsDNA Assay Kit BR using fluorescence plate reader. Right: Quantification of dsDNA with EliDNA QBT dsDNA Assay Kit BR using Qubit<sup>®</sup> Fluorometer.



## EliDNA QBT ssDNA Quantification Assays

The EliDNA QBT ssDNA quantification kits are ideal for quantification of ssDNA molecules or oligonucleotides. This kit is NOT selective for ssDNA over dsDNA or RNA, but it will not detect contaminating protein or nucleotides.

This assay contains concentrated quantification reagent, dilution buffer, and pre-diluted ssDNA standards. Simply dilute the reagent using provided buffer, add your sample (any volume between 1  $\mu$ l and 20  $\mu$ l is acceptable), and read the fluorescence using a fluorescence plate reader or fluorometer. The assay is well tolerated to common contaminants such as proteins, salts, solvents, detergents, or free nucleotides. The assay can be adapted for use in microplates, tubes or cuvettes. Kits are designed in an "Add-and-Read" format to simplify DNA quantification and speed up your workflow.

The EliDNA QBT ssDNA quantification kit can be used to measure ssDNA concentrations between 5ng/mL and 1 000 ng/mL.

The assay is ideal for ssDNA quantification of oligos, primers, denaturated DNA or PCR products.

## EliDNA QBT RNA Quantification Assays

The EliDNA QBT RNA quantification kits are designed specifically for easy and accurate quantification of RNA. Both kits are highly selective for RNA in the presence of DNA, and offer advantages in stability, linear dynamic range, and sensitivity over other traditional of RNA quantitation.

The assays contain concentrated quantification reagent, dilution buffer, and pre-diluted RNA standards. Simply dilute the reagent using provided buffer, add your sample (any volume between 1  $\mu$ l and 20  $\mu$ l is acceptable), and read the fluorescence using a fluorescence plate reader or fluorometer. The assay is well tolerated to common contaminants such as proteins, salts, solvents, detergents, or free nucleotides. The assay can be adapted for use in microplates, tubes or cuvettes. Kits are designed in an "Add-and-Read" format to simplify RNA quantification and speed up your workflow.

The RNA quantification kits are offered in high sensitivity and broad range formats: the EliDNA QBT RNA Assay Kit HS can be used to measure RNA concentrations between 25 ng/mL and 100 ng/mL, and the EliDNA QBT RNA Assay Kit BR can be used to measure RNA concentration between 100 ng/mL and 5 000 ng/mL.

Both assays are ideal for RNA quantification of samples for microarray, RT-PCR and Northern blot procedures.

| Cat. No.                      | Product name                  | Sensitivity | Unit Size                  |
|-------------------------------|-------------------------------|-------------|----------------------------|
| ED-QBT12-200<br>ED-QBT12-1000 | EliDNA QBT ssDNA<br>Assay Kit | 1–200 ng    | 200 assays<br>1 000 assays |
| ED-QBT16-1000                 | EliDNA QBT Assay Tubes        | N/A         | 1 000 tubes                |

▲ Sensitivity per 200ul assay

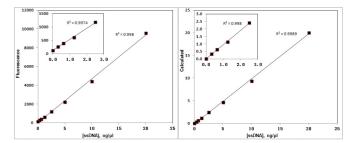


Figure 8. Left: Quantification of ssDNA with EliDNA QBT ssDNA Assay Kit using fluorescence plate reader. Right: Quantification of ssDNA with EliDNA QBT ssDNA Assay Kit using Qubit® Fluorometer.

| Cat. No.                      | Product name                   | Sensitivity | Unit Size                  |
|-------------------------------|--------------------------------|-------------|----------------------------|
| ED-QBT13-200<br>ED-QBT13-1000 | EliDNA QBT RNA<br>Assay Kit HS | 5–100 ng    | 200 assays<br>1 000 assays |
| ED-QBT14-200<br>ED-QBT14-1000 | EliDNA QBT RNA<br>Assay Kit BR | 20–1 000 ng | 200 assays<br>1 000 assays |
| ED-QBT16-1000                 | EliDNA QBT Assay Tubes         | N/A         | 1 000 tubes                |
|                               |                                |             |                            |

▲ Sensitivity per 200ul assay

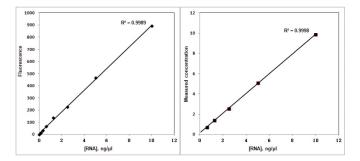


Figure 9. Left: Quantification of ribosomal RNA with EliDNA QBT RNA Assay Kit HS using fluorescence plate reader. Right: Quantification of ribosomal RNA with EliDNA QBT RNA Assay Kit HS using Qubit<sup>®</sup> Fluorometer.