

Fluo-3100

Fluorometer



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

►► Fluorometer technical background

Our nano series Micro-Spectrophotometer measure the concentration and purity of the sample, because it is able to measure the absorbance of the whole ingredient (such as DNA, RNA, oligos and so on) of the sample at 260nm, that may make the read inaccurate. While the fluorometer measures the fluorescence intensity of the fluorescent reagent which combines with the target molecule to read the concentration of sample. Generally, the read is lower than Nano series products but much more accurate than it.

The sensitivity of Nano series products is above 5ng/ul, and while the fluorometer is 0.5pg/ul in measuring DNA concentration. It is important and necessary for the most applications to read the lower and accurate concentration of the sample. Using the Fluo-3100 fluorometer with the quantitation kit can measure the sample concentration rapidly, sensitively and accurately.

►► Fluo-3100 Simple, easy to use and applications

The Fluo-3100 is a dual-channel fluorometer, it provides high-sensitive fluorescent detection when quantifying nucleic acids and proteins, simple and cost to operate. Applications:

1. The sample is scarce and difficult in processing
2. The low quantity of DNA, RNA, or protein after extraction
3. The sample will be used in the expensive experiments:
qPCR, PCR cloning, transfection, the next generation sequencing and etc.

►► Fluo-3100 Highlights

1. Simple – 4.3 inch touch screen, small and easy to use
2. Easy measurement within 3 sec for DNA, RNA, and protein
3. High sensitivity – Lowest DNA detection limit is 0.5pg/ul
4. Two optical channels – Equipped with two fluorescence channels for nucleic acid, protein quantitation in one detection
5. Linear Dynamic Range--Five orders of magnitude.
6. Opening system--You can match the instrument with the reagent you choose
7. It can save at most 1,000 data and output data by USB port
8. Adapter: 0.5ml qPCR tube adapter
0.2ml qPCR tube adapter



►► Two detection models of Fluo-3100

| Code | Light | Excitation Filters | Emission Filters |
|------------|-------|--------------------|------------------|
| Fluo-3100A | UV | 365±20nm | 420-480nm (60nm) |
| | Blue | 460±20nm | 525-570nm (45nm) |
| Fluo-3100B | Blue | 460±20nm | 525-570nm (45nm) |
| | Red | 625±20nm | 670-725nm (55nm) |
| Fluo-3100B | Blue | 460±20nm | 525-570nm (45nm) |
| | Green | 525±20nm | 575-640nm (65nm) |

►► Specification

| | |
|----------------------|--------------------------|
| Light source | LED |
| Dynamic range | Five orders of magnitude |
| Linear Dynamic Range | R ² >0.995 |
| Detector | Photodiode |
| Repeatability | <1.5% |
| Stability | <1.5% |
| Sensitivity | dsDNA: 0.5ng/ml |
| Measurement speed | 3s (Once) |
| Dimension (W×D×H)mm | 194 × 155 × 72.5 mm |
| Weight (kg) | 0.4Kg |

►► Fluo-3100 Quantitation kit

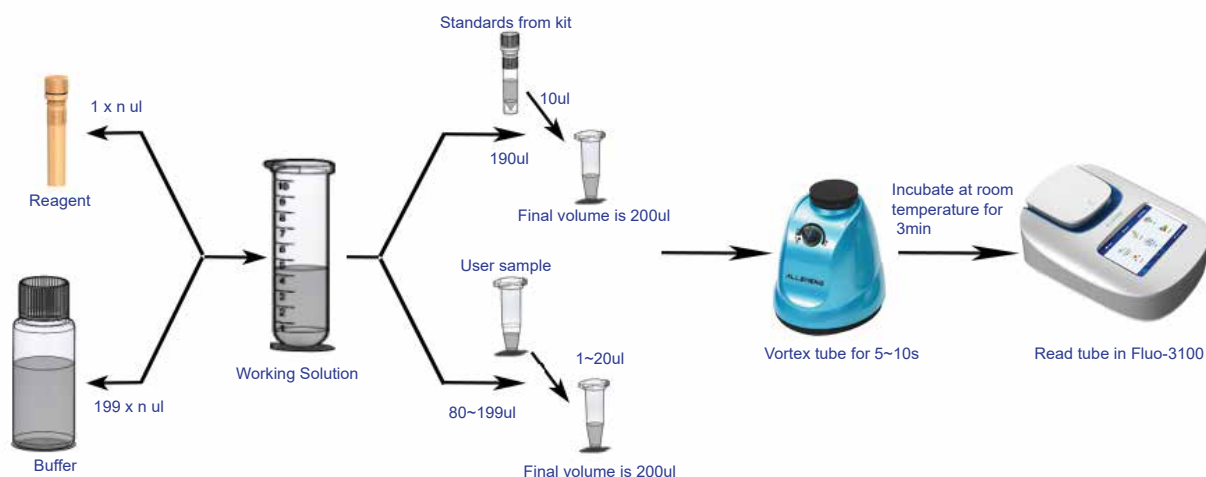
High sensitivity of dsDNA Quantitation Kit: 0.2--100ng

High sensitivity of ssDNA Quantitation Kit: 1--200ng

Broad range of dsDNA Quantitation Kit: 100--1600ng

Protein Quantitation Kit is researching

►► Fluo-3100 Quantitation kit operation



►► Application of different fluorescence channel

| Channel | Excitation Filters | Normal kits | Applications |
|---------------|--------------------|--|---|
| UV channel | 365±20nm | Hoechst 33258, 4-MU, EnZCheK Caspase | Nucleic acid quantification, Plant GUS reporter gene detection, Poptosis detection |
| Blue channel | 460±20nm | PicoGreen®, oligreen, RiboGreen®, GFP, Protein, Fluorescein, Quant-iT™ | dsDNA, ssDNA, RNA quantification, GFP gene detection, Fluorescein detection, Protein detection |
| Green channel | 525±20nm | Rhodamine, Cy3, RFP Vybrant Cytotoxicity | Rhodamine detection, Cy-3 fluorescence labeling detection, RFP gene detection, Cell activity position detection |
| Red channel | 625±20nm | Cy5, Quant-iT RNA | Cy-5 fluorescence labeling detection, RNA quantification |

►► Ordering Information

| Code | Description | Code | Description |
|-------------|--|-------------|--|
| AS-18010-00 | Fluo-3100A Fluorometer, DC12V 1A | RS-FL0101-S | High-sensitivity dsDNA Quantitation kits (100 assays) |
| AS-18020-00 | Fluo-3100B Fluorometer, DC12V 1A | RS-FL0101-M | High-sensitivity dsDNA Quantitation kits (200 assays) |
| | | RS-FL0101-L | High-sensitivity dsDNA Quantitation kits (1000 assays) |
| AS-18030-00 | Fluo-3100C Fluorometer, DC12V 1A | RS-FL0102-S | Broad-range dsDNA Quantitation kits (100 assays) |
| AS-18011-01 | Adapter for 0.5ml qPCR tube (Standard) | RS-FL0102-M | Broad-range dsDNA Quantitation kits (200 assays) |
| | | RS-FL0102-L | Broad-range dsDNA Quantitation kits (1000 assays) |
| AS-18011-02 | Adapter for 0.2ml qPCR tube (Optional) | RS-FL0103-S | High-sensitivity ssDNA Quantitation kits (100 assays) |
| | | RS-FL0103-M | High-sensitivity ssDNA Quantitation kits (200 assays) |
| | | RS-FL0103-L | High-sensitivity ssDNA Quantitation kits (1000 assays) |

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Counter



Optical Emission
Spectrophotometer



DSC/TGA



Semi Auto Bio
Chemistry Analyzer



HEMA 2062
Hematology
Analyzer



Micro Plate
Reader/Washer



URINOVA 2800
Urine Analyzer



Total Organic
Carbon 3800



Fully Automated
CLIA



NOVA-2100
Chemistry Analyzer



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RTPCR



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system

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2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

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Reach us @



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