

ALLSHENG



## Fluorometer Series

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# Fluo-200 / Fluo-800 Fluorometer

The new fluorometer Fluo-200 and Fluo-800 are used for high sensitivity quantitative analysis of DNA, RNA and protein.

Fluo-800 is available to do the fluorescence detecting for 8 samples in simultaneous. High precision detection method reduces the variation effectively. Easy and humanized software, intuitive user interface and rapid test method greatly shorten the testing time.

## » Feature



### Fluo-200

- » **Simple and intuitive**----7 inch color touch screen
- » **Fast detection**----fast & accurate quantification of DNA, RNA & protein in 5 s
- » **Accurate quantification**----high accuracy with only 1-20  $\mu\text{L}$  samples
- » **High sensitivity**----the lowest detection limit can be 0.1  $\text{pg}/\mu\text{L}$  (dsDNA)
- » **Dual channel detection**----adapt to more dyes
- » **Stores results**----up to 10000 programs can be stored
- » **Data save**----save sample data as a CSV or PDF file
- » **Data export**----be exported directly to U disk, or connected to an external printer
- » **Open reagent application**----can match reagents from different manufacturers



### Fluo-800

- » **Simple and intuitive**----7 inch color touch screen
- » **High throughput**----8 samples per run
- » **Fast detection**----8 samples can be detected in 6 s
- » **Accurate quantification**----high accuracy with only 1-20  $\mu\text{L}$  samples
- » **High sensitivity**----the lowest detection limit can be 1  $\text{pg}/\mu\text{L}$  (dsDNA)
- » **Stores results**----up to 10000 programs can be stored
- » **Dual channel detection**----adapt to more dyes
- » **Data export**----be exported directly to U disk, or connected to an external printer
- » **Data save**----save sample data as a CSV or PDF file
- » **Open reagent application**----can match reagents from different manufacturers

## » Flexible Software



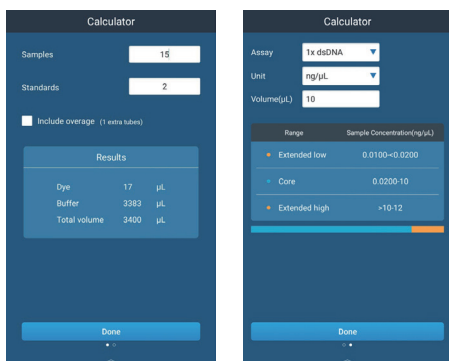
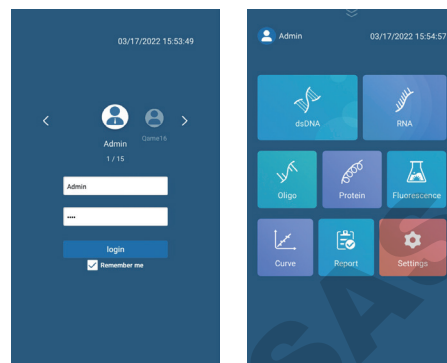
### User Authorization Management

User independent account and password to ensure program stability



### Intuitive Interface Display

Modular layout makes function display more intuitive



### Reagent Concentration Calculator

Quickly generate working solution preparation dosage, shorten reagent preparation time



### Sample Concentration Analysis

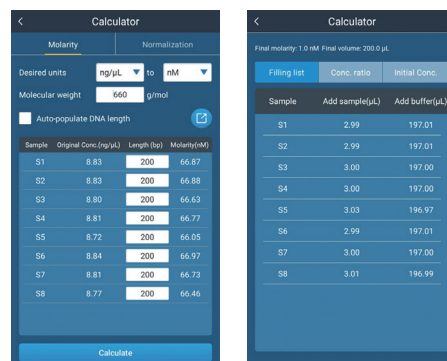
To use the calculator to show how the assay range changes. It can help to select the appropriate assay based on sample volume and estimated sample concentration for the most accurate quantification



### NGS Workflow Calculator

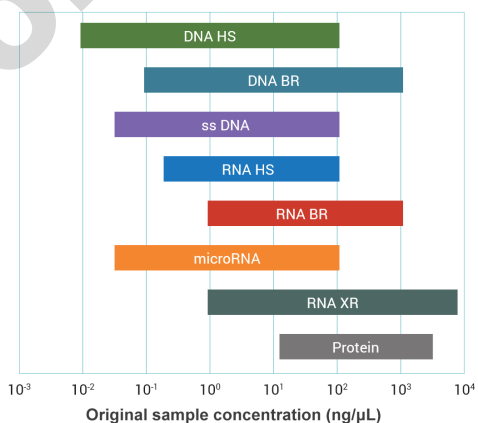
Use the molarity calculator to convert to molarity based on nucleic acid length and measured concentration.

Required weight, concentration, or molarity can be easily normalized via the normalization calculator, which replaces spreadsheet calculations for standard normalization during sequence library preparation

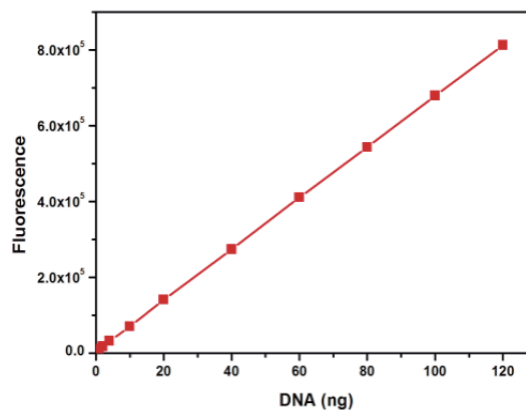


## » Performance Test

### ① Common samples and quantitative ranges



### ② Allsheng® High Sensitivity dsDNA Quantification Kit with linear quantitation range of 0.2–100 ng



## » Specification

Model	Fluo-200	Fluo-800
Light source	LED	LED
Excitation filter	Blue: 460±20 nm Red: 625±20 nm	Blue: 460±20 nm Red: 625±20 nm
Emission filter	Green: 525-570 nm (45 nm) Red: 670-725 nm (55 nm)	Green: 525-570 nm (45 nm) Red: 670-725 nm (55 nm)
Detector	Photodiode	Photodiode
Throughput	1	8
Sample tube type	0.5 mL PCR tube	0.2 mL tube strip
Linear	$r^2 \geq 0.995$	$r^2 \geq 0.995$
Linear range	5 orders of magnitude	4 orders of magnitude
Sensitivity (detection limit)	<0.1 pg/μL (dsDNA HS)	<1 pg/μL (dsDNA HS)
Measurement time	≤5 s/sample	≤6 s/8 samples
Input power	24 V 2 A	24 V 2 A
Operating voltage	100-240 V@50-60 Hz	100-240 V@50-60 Hz
External port	USB (Type A) ×2, USB (Type B) ×1, LAN ×1	USB (Type A) ×2, USB (Type B) ×1, LAN ×1
Display	7-inch touch screen	7-inch touch screen
Dimension (D×W×H)	286 mm×161 mm×61 mm	286 mm×161 mm×75 mm
Weight	1.5 kg	2 kg
Storage capacity	10000 programs	10000 programs

## » Ordering Information

Code	Description
AS-18050-00	Fluo-200 fluorometer (Blue & Red)
AS-18060-00	Fluo-800 fluorometer (Blue & Red)
RS-FL 0101-S	Allsheng® high sensitivity dsDNA quantification kit (100 assays)
RS-FL 0101-M	Allsheng® high sensitivity dsDNA quantification kit (200 assays)
RS-FL 0101-L	Allsheng® high sensitivity dsDNA quantification kit (1000 assays)
RS-FL 0102-S	Allsheng® broad range dsDNA quantification kit (100 assays)
RS-FL 0102-M	Allsheng® broad range dsDNA quantification kit (200 assays)
RS-FL 0102-L	Allsheng® broad range dsDNA quantification kit (1000 assays)

# Fluo-100 Fluorometer

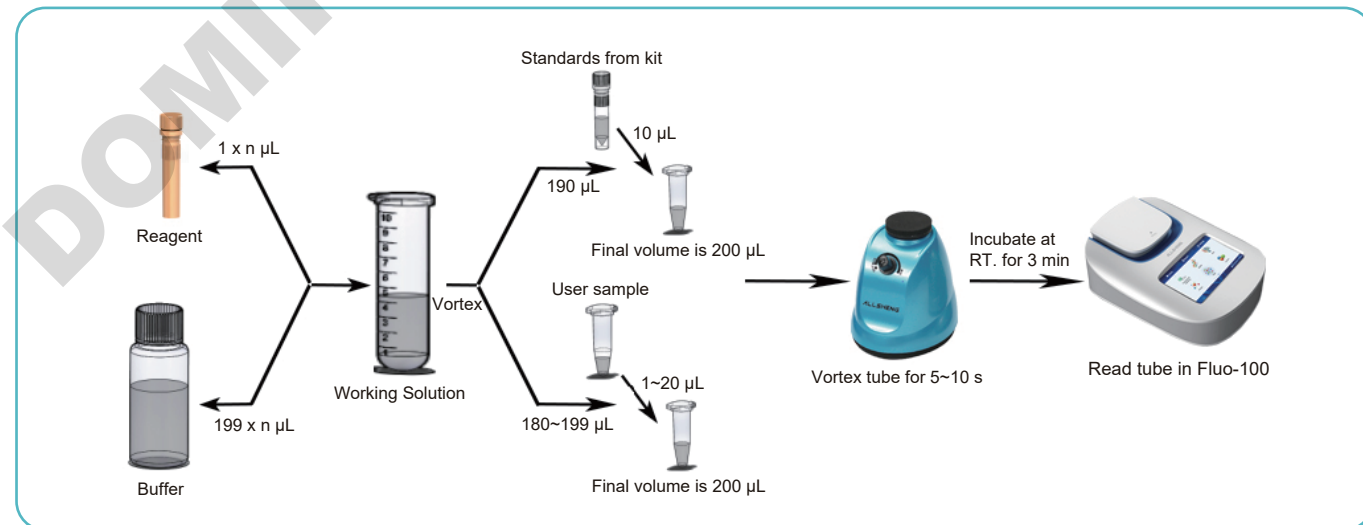
UV spectrophotometry is the most common method for testing the quality of nucleic acids in laboratories, but the UV method measures the absorbance at 260 nm, including DNA, RNA, protein, salt ions and free nucleotide molecules, so the readings are not very accurate. In addition, UV spectrophotometers are not sensitive enough to accurately quantify DNA and RNA at low concentrations.

Fluo-100 fluorometer detects the concentration of target molecules by detecting the fluorescence intensity of the fluorescent dye combined with the target molecules, and the results are more accurate. Due to the high sensitivity of fluorescence, the instrument kit can be used to detect dsDNA samples as low as 0.5 pg/ $\mu\text{L}$ . Therefore, using Fluo-100 and supporting analysis kits, the concentration of samples—DNA, RNA or protein, can be accurately and quickly detected, avoiding duplication of work caused by inaccurate measurements.

## » Features



## » Fluo-100 Quantitation Kit Operation



## » Two Detection Modes of Fluo-100

Model	Light	Excitation wavelength	Emission wavelength
Fluo-100A	UV	365±20 nm	420-480 nm (60 nm)
	Blue	460±20 nm	525-570 nm (45 nm)
Fluo-100B	Blue	460±20 nm	525-570 nm (45 nm)
	Red	625±20 nm	670-725 nm (55 nm)
Fluo-100C	Blue	460±20 nm	525-570 nm (45 nm)
	Green	525±20 nm	575-640 nm (65 nm)

## » Specification

Light source	LED
Dynamic range	5 orders of magnitude
Linear Dynamic Range	R <sup>2</sup> >0.995
Detector	Photodiode
Repeatability	<1.5 %
Stability	<1.5 %
Sensitivity	dsDNA: 0.5 ng/mL
Measurement speed	3 s (once)
Dimension (W×D×H)	194×155×72.5 mm
Weight	0.4 kg

## » Ordering Information

Code	Description
AS-18010-00	Fluo-100A fluorometer, DC 12 V 1 A
AS-18020-00	Fluo-100B fluorometer, DC 12 V 1 A
AS-18030-00	Fluo-100C fluorometer, DC 12 V 1 A
AS-18011-01	Adapter for 0.5 mL qPCR tube (standard)
AS-18011-02	Adapter for 0.2 mL qPCR tube (optional)

Code	Description
RS-FL 0101-S	Allsheng® high sensitivity dsDNA quantification kit (100 assays)
RS-FL 0101-M	Allsheng® high sensitivity dsDNA quantification kit (200 assays)
RS-FL 0101-L	Allsheng® high sensitivity dsDNA quantification kit (1000 assays)
RS-FL 0102-S	Allsheng® broad range dsDNA quantification kit (100 assays)
RS-FL 0102-M	Allsheng® broad range dsDNA quantification kit (200 assays)
RS-FL 0102-L	Allsheng® broad range dsDNA quantification kit (1000 assays)
RS-FL 0103-S	Allsheng® high sensitivity ssDNA quantification kit (100 assays)
RS-FL 0103-M	Allsheng® high sensitivity ssDNA quantification kit (200 assays)
RS-FL 0103-L	Allsheng® high sensitivity ssDNA quantification kit (1000 assays)

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