



## **Fluorometer Series**

## **MBI Evolution Fluo-100**

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.

MBI Evolution Fluo-100 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  $pg/\mu$ L. Therefore, using MBI Evolution 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.







## **>>** Two Detection Modes of Fluo-100

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