PicoGreen dsDNA Quantitation Kit

The conventional method for detecting DNA content is to measure its absorbance at 260 nm (A260). The main disadvantage of this method is that nucleotides, single-stranded nucleic acids, and proteins have a significant impact on the signal. It is also susceptible to interference from contaminants in the nucleic acid preparation process. Moreover it is not sensitive, and it cannot distinguish between DNA and RNA.

The PicoGreen dsDNA Quantitation Kit is a highly sensitive fluorescence detects method. It only emits the fluorescence when it binds to double-stranded DNA; it does not emit fluorescence without DNA. The fluorescence intensity is proportional to the DNA concentration. The detection limit of the PicoGreen DNA quantification method is approximately 0.3 ng/mL, and the linearity is good (R2 > 0.99) when the DNA content is in the range of 1.25-80 ng/mL.

The PicoGreen is a techniques for the following purposes: construction of cDNA libraries; purification and applicationof DNA fragments for subcloning, such as DNA quantification, product amplification, and furtherdetection of primers. Br>
The PicoGreen quantitative detection method is simple and convenient, and it has been chosen by many biopharmaceutical manufacturers, becoming the standard for residual DNA detection in biologics. Nowadays, many vaccines are cell-cultured vaccines, such as recombinant hepatitis B vaccine, rabies vaccine, and most other vaccines are produced using cell culture methods. Purification of the vaccine is a key issue, as we need to remove host cell DNA and host proteins as much as possible. If host cell DNA and proteins are injected into the human body along with the vaccine, it could lead to unpredictable consequences.

Catalog No.	120100
Size	100 rxns / 500 rxns
Product Category	Nucleic Acid Quantitation