



DNA Quantity Kit

Introduction

The DNA Quantity Kit (Cat.No.PMC-AK06-COS) is designed to quantify DNA directly from cell culture. DNA can be quantified without purification process from cell culture as Color Development Reagent binds to cellular double stranded DNA and emits blue fluorescence at 458 nm.

Components

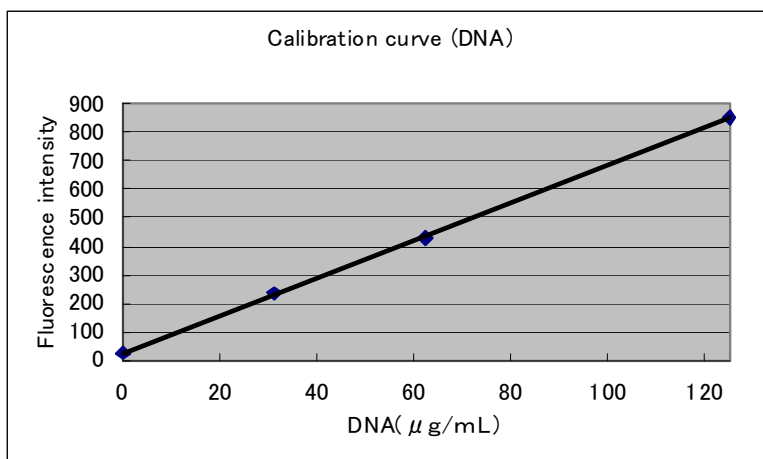
Component	Quantity	Storage
Color Development Reagent	10 mL	4°C
Dilution Buffer	150 mL × 2	4°C
DNA Standard (100 ug/ ml)	2 mL	4°C

Additional Materials Required

- Purified water
- Fluorometer
- Phosphate Buffered Saline (PBS)

Preparation of Standard Curve

1. Standard sample preparation
Dilute the stock DNA Standard (100 ug/mL) to 50, 25, 12.5 and 0 ug/mL with purified water.
Diluted sample standards can be stored frozen at -20°C.
2. Transfer each 50 ul of standard sample to new tubes.
3. Add 1ml Dilution Buffer to each standard sample and mix well.
4. Add 50 ul of Color Development Reagent to each tube.
5. Mix thoroughly.
6. Measure fluorescence. (Excitation wavelength at 356nm, emission wavelength at 458nm)



Sample Analysis (24well plate format)

1. Remove culture medium and rinse the culture plate with Phosphate Buffered Saline (PBS).
2. Remove PBS and add 500 ul of dilution buffer to each well.
3. Sonicate cells until completely homogenated.
4. Transfer 50 ul of homogenate sample to new tube.
5. Add 1ml of Dilution Buffer to each tube and mix well.
6. Add 50 ul of Color Developer to each tube.
7. Mix thoroughly.
8. Measure fluorescence. (Excitation wavelength at 356nm, emission wavelength at 458nm)

References

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- (2) Okura, H., Komoda, H., Saga, A., Kakuta-Yamamoto, A., Hamada, Y., Fumimoto, Y., Lee, CM., Ichinose, A., Sawa, Y., Mat suyama, A. Properties of He patocyte-like Cell Cl usters from Huma n Adipo se Tissue-Derived Mesenchymal Stem Cells. *Tissue Eng. Part C Methods.* 16, 761-70 (2010)
- (3) Saito, Y., Goto, M., Maya, K., Ogawa, N., Fujimori, K., Kuroka wa, Y., Satomi, S. The Influen ce of Brain Death on Tissue Factor Expression in the Pan creatic Tissues and Isolate d Islets in Rats. *Transplant. Proc.* 41, 307-310 (2009)

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