

Absolute length of chromosome telomere detection kit

Catalog No: #MSE-1012



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Description

Product Name	Absolute length of chromosome telomere detection kit
Storage	The kit can be stored at -20°C for 6 months. The reagents in the kit should be unfrozen, centrifuged and mixed at room temperature before use. When the bottle is opened, it is recommended to be stored in aliquots. Avoid repeated freezing and thawing.

Product Description

Through fluorescence quantitative PCR method and by constructing standard curve of standard sample, this kit is used to quantitatively detect the absolute value of the average length of chromosome telomere. Through quantitative evaluation of cell senescence at molecular biological level, it provides a reliable monitoring tool for many serious diseases such as aging, chronic functional diseases, metabolic diseases, as well as organ transplantation and survival time of stem cells in vivo. At present, dynamic monitoring of telomere absolute length is considered to be a sensitive molecular biological marker for tumors before producing specific diagnostic markers. The method is with high reproducibility and accuracy, and requires less sample and time.

Composition: PCR Mix 1 mL

Reference genes upstream and downstream primers 50 μ L

Target genes upstream and downstream primers 50 μ L

Reference gene standard 10 μ L

Target gene standard 10 μ L

Nuclease-Free Water 1 mL Purpose: Quality Index: Sample Requirements: The kit is mainly used to detect the absolute length of human chromosome telomere. The samples can be obtained from human hair, blood and saliva. The purity of DNA extracted from the sample should meet the requirement and does not contain any PCR inhibitor. Using Protocol: 1. Sample preparation: Dilute the concentration of DNA template to 10 ng/ μ L by nuclease-free water.

2. Gradient dilution of Standard: The reference gene and target gene are diluted according to the following steps.

(1) Take 5 x 0.2 mL PCR centrifuge tubes and mark them.

(2) Pipette 9 μ L nuclease-free water into 5 PCR tubes respectively.

(3) Dilute standard at 10 times. The recommended steps are as follows

Pipette 1 μ L solution from the original solution to the first dilution gradient (10⁻¹) tube and mix it, then pipette 1 μ L from it to the next dilution gradient tube, and repeat the step do five concentration gradient dilutions (10⁻¹ - 10⁻⁵)

3. PCR reaction system .

4. PCR reaction conditions

95°C 10 min

95°C 15 s 40 cycle

60°C 1 min 40 cycle

95°C 15 s Dissolving curve

60°C 1 min Dissolving curve

95°C 15 s Dissolving curve

Note: Reaction conditions should be according to the different fluorescence quantitative PCR instrument. You can select the default reaction conditions for absolute quantitative PCR method in this kit. As mentioned, it use Sybrgreen I as fluorescence dye. Attention: 1. This product is used for research only.

2. Mix up and down before use, avoid bubbles as soon as possible and centrifuge transiently for use.

3. Aliquot the product for storage and avoid freezing and thawing repeatedly.

Note: This product is for in vitro research use only