

## **Product Datasheet**

## Human Telomere Length Quantification qPCR Assay Kit (orb1736804)

Catalog Number orb1736804

**Category** Tools

**Description** 

1.Quickly get results, saving up to 50% of the time | 2.Optimized ready-to-use master mix for rapid PCR reactions 3.Accurate detection of various starting amounts of templates, stable amplification, quantitative results with high repeatability | 4.Balanced K+ and NH4+ ion ratios, as well as stand-alone ROX Reference Dye packaging for all real-time PCR instruments. Telomere (Telomere) is a DNA sequence at the end of a eukaryotic cell chromosome composed of multiple repeating nucleotide elements (TTAGGG) in tandem. In addition to providing a buffer for non-transcribed DNA, it can also protect the end of the chromosome from fusion and Degenerate, protect chromosome structure stability and genetic integrity. Telomere is the most important and accurate indicator of a person's aging rate. Its initial length is determined by genetic and environmental factors, and will decrease over time. Studies have shown that telomere length is closely related to DNA repair, aging, apoptosis, and tumorigenesis. Therefore, accurate and repeatable measurement of telomere length is particularly important for researchers. This product mainly uses relative quantitative qPCR to directly compare the average telomere length of the sample, that is, the copy number ratio (T/S) of the telomere repeat sequence (Tel) and the genome single copy gene (SCR) copy number (T/S) is used as the telomere relative length. Single-copy gene primers (SCR) specifically recognize and amplify the 78bp long region on human chromosome 11. The primer set in the kit has passed the test to ensure: (1) efficient and reliable quantification; (2) no non-specific amplification. Each set of primers has been verified by amplification curve efficiency (E>98%, R2>0.99), melting curve analysis and gel electrophoresis verification..

**Note** For research use only

**Expiration Date** 12 months from date of receipt.