

## Product Datasheet

# Vazyme - UniPeak U+ One Step RT-qPCR SYBR Green Kit (Q226-01)

**Catalog Number** Q226-01

**Category** Tools

**Description** UniPeak U+ One Step RT-qPCR SYBR Green Kit is a dye-based RT-qPCR reagent specifically designed for quantitative PCR detection using RNA as the template. The dye-based fluorescence quantitative detection presents two major challenges: the difficulty of detecting low-concentration samples and the issue of non-specific amplification. This product addresses these challenges with a next-generation antibody-modified Taq DNA Polymerase and a one-step, temperature-activated Reverse Transcriptase, combined with an optimized buffer system for RT-qPCR, offering enhanced sensitivity and specificity. To further ensure accurate quantification, a dUTP/UDG anti-contamination system is included, eliminating aerosol contamination at room temperature. Additionally, the 5 × gDNA Wiper effectively removes any residual genomic DNA contamination from RNA templates. The 2 × One Step SYBR Green Master Mix includes tracking dye and universal ROX Reference Dye, making it compatible with all types of qPCR instruments, requiring only the addition of primers and templates for amplification.

**Usage Notes** Restricted to UK and Ireland's customers ONLY

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**Storage**

Store at -30 ~ -15°C and ship at ≤0°C. 2 × One Step SYBR Green Master Mix store at -30 ~ -15°C, protect from light. Performance Ultra-Sensitive, Highly Specific One-Step RT-qPCR A comparison test between Q226 and Supplier A was conducted across three systems with varying GC content and one non-specific system. Results showed that Q226 demonstrated superior sensitivity compared to the competitor. Additionally, in the non-specific system, the melting curve presented a single peak, indicating high specificity. Equipped with UDG anti-contamination system When 4, 40, and 400 pg of all-U and all-T templates were tested, the contamination prevention efficiency was calculated using the formula:  $E = (1 - 2^{-(\Delta C T (all-U - all-T))})\%$ . The contamination prevention efficiency of Q226 exceeded 99% across all concentrations. Incorporating a gDNA removal module for more reliable results For 100 ng of gDNA template, no amplification curves were observed after treatment with the gDNA removal module, indicating that the gDNA Wiper in Q226 achieved a 100% removal efficiency.

**Background**

Only available for the UK and Republic of Ireland

**Note**

For research use only

**Expiration Date**

12 months from date of receipt.

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