

# Gene Expression & qPCR



# AzuraQuant™ Green One-Step qPCR Mix

The AzuraQuant™ Green One-Step qPCR Mix is a ready-to-use 2x master mix and companion thermostable reverse transcriptase for use in highly sensitive real-time RT-PCR assays in which intercalating dye-based detection provides the option of a post amplification melt profile.

The system contains Vivid-Green™ dye, a novel fluorescent DNA-binding dye which produces minimal PCR inhibition and greater fluorescence upon binding to double stranded DNA than SYBR® Green I. The AzuraQuant™ Green One-Step qPCR Mix is powered by Azura HS Taq DNA Polymerase and HighTherm™ Reverse Transcriptase, and an optimized buffer chemistry, providing robust first-strand cDNA synthesis and real-time PCR in a single tube.

The Mix delivers earlier quantification cycle values (Ct) and broad range detection for increased sensitivity, speed, reliability and reproducibility. The AzuraQuant™ Green One-Step qPCR Mix can be used to quantify a specific target RNA from either total RNA or mRNA while reducing the number of pipetting steps and time to result.

In order to determine instrument compatibility and the most appropriate ROX™ variant, please refer to the AzuraQuant™ Selection Table.

## Applications

- Gene Expression analysis
- Pathogen detection
- Viral Quantitation
- Biomarker discovery
- Gene knock-down validation
- Microarray validation
- Detection of extremely low copy targets

## Flexibility

- Compatible with standard and fast cycling instruments and a wide range of cycling parameters

## Accurate Quantification

- Efficient One-Tube, One-Step RNA quantification, reducing sample manipulations and experimental variation

## Sensitivity and Speed

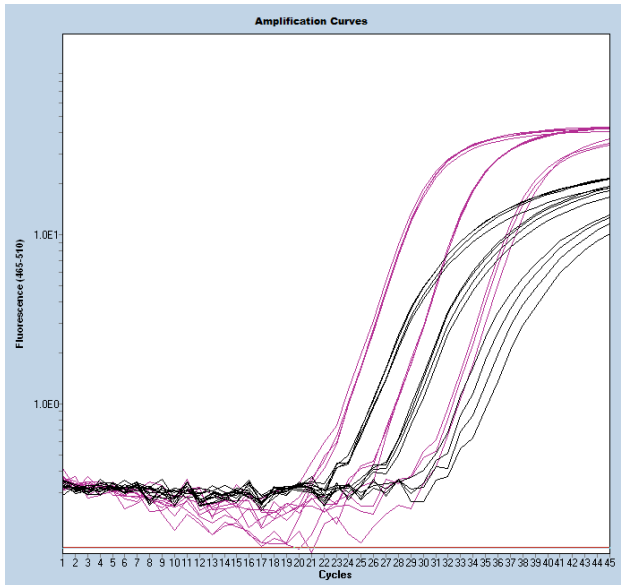
- Optimized buffer chemistry for maximum enzyme efficiency allowing detection of low-copy targets with earlier quantification values

Product	Pack Size	Catalog No.	Price
AzuraQuant™ Green One-Step qPCR Mix HiRox	100 Reactions	AZ-3501	\$135
AzuraQuant™ Green One-Step qPCR Mix HiRox	500 Reactions	AZ-3505	\$610
AzuraQuant™ Green One-Step qPCR Mix HiRox	1,000 Reactions	AZ-3510	\$1,075
AzuraQuant™ Green One-Step qPCR Mix LoRox	100 Reactions	AZ-3701	\$135
AzuraQuant™ Green One-Step qPCR Mix LoRox	500 Reactions	AZ-3705	\$610
AzuraQuant™ Green One-Step qPCR Mix LoRox	1,000 Reactions	AZ-3710	\$1,075

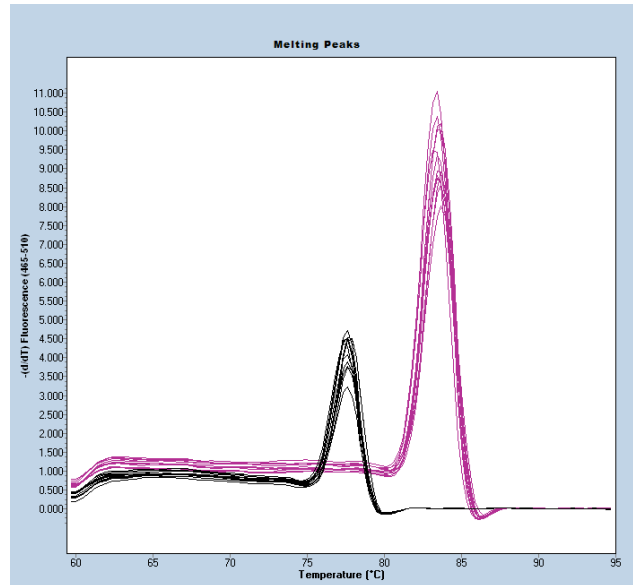


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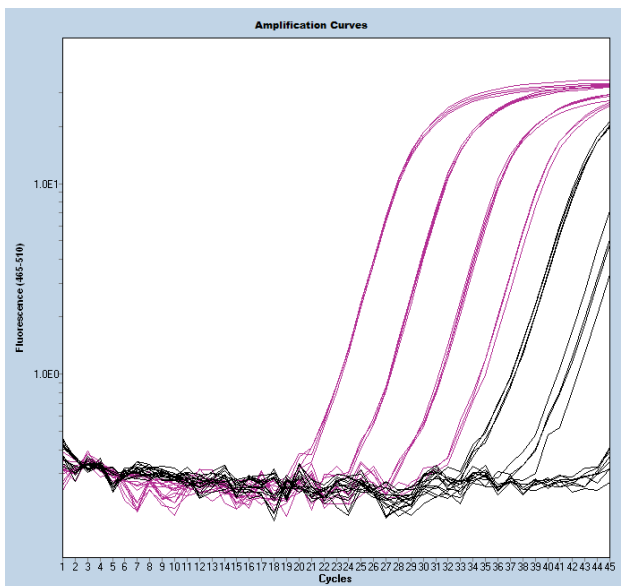
Panel A Trace



Panel A Melt



Panel B Trace



Panel B Melt

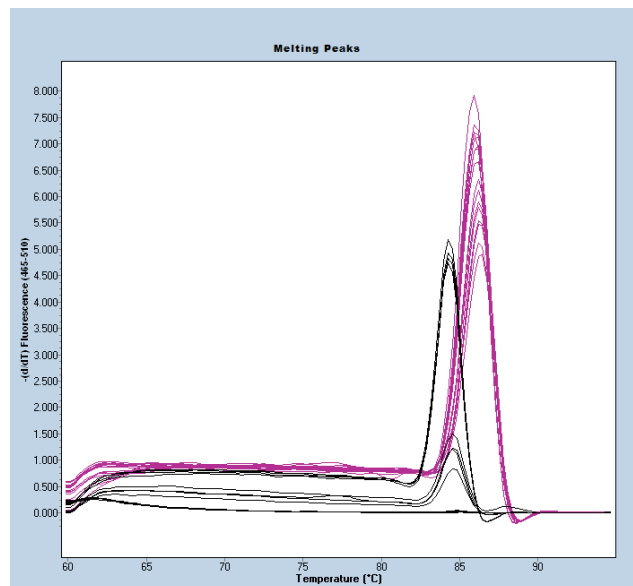


Fig 1. Exceptional Speed and Sensitivity of AzuraQuant™ Green One-Step qPCR Mix.

- qPCR amplification and melt traces of mouse housekeeping gene Phosphoglycerate kinase 1 (PGK-1) directly from Total RNA (dilution series). Panel A: AzuraQuant™ Green One-Step qPCR Mix (Purple) is compared with Applied Biosystems Power SYBR® RNA-to-CT™ 1-Step Kit (Black). Panel B: AzuraQuant™ Green One-Step qPCR Mix (Purple) is compared with Qiagen QuantiTect® SYBR Green RT-PCR Kit (Black). In each case, AzuraQuant™ Green One-Step qPCR Mix exhibits earlier Ct values and improved sensitivity.