

Cy5 Dye qPCR Calibration Solution *10,000X*

 Catalog number: 67033
 Unit size: 100 ul

Component	Storage	Amount (Cat No. 67033)
Cy5 Dye qPCR Calibration Solution *10,000X*	Freeze (< -15 °C), Minimize light exposure	100 µL

OVERVIEW

Real-time thermal cyclers require calibration to generate a spectral profile for the fluorescence signal. Since instruments can differ in fluorescence detection sensitivity, the concentrations needed to calibrate any dye, such as Cy5, will depend on the device used. The AAT Bioquest Cy5 dye qPCR Calibration Solution supplied as a 10,000X concentrate is compatible with a wide variety of qPCR instruments, including the ABI7500 Fast, QuantStudio™, and ViiA™ 7 systems. Calibration and verification should be run every six months or as needed. Please refer to the instrument maintenance guide for complete instructions on use.

KEY PARAMETERS
qPCR

Recommended plate PCR Microplate
 Instrument specification(s) Cy5 Filter

SAMPLE EXPERIMENTAL PROTOCOL

This generic protocol is suitable for the ABI7500 FAST qPCR instrument. For complete instructions on use, refer to the maintenance guide for your instrument.

Prepare a Cy5 calibration plate:

1. Prepare a Cy5 Dye qPCR Calibration working solution by mixing 1 µL of the 10,000X Cy5 Dye qPCR Calibration Solution with 10 mL of nuclease-free water or qPCR buffer. Note the final dye concentration must be optimized based on the calibration requirements for your instrument. Refer to the manufacturer's maintenance guide for detailed instructions.
2. Add 20 µL of the Cy5 Dye qPCR Calibration working solution to all wells of a reaction plate. Note the volume may vary depending on your instrument. Refer to the manufacturer's maintenance guide for detailed instructions.
3. Seal the plate with an optical adhesive cover.
4. Centrifuge the plate for 2 minutes at < 1500 rpm.
5. Check that the liquid in each well of the plate is at the bottom of the well. If not, centrifuge the plate again at a slightly higher rpm and for a longer period of time.
6. For complete calibration instructions, refer to the maintenance guide for your instrument.

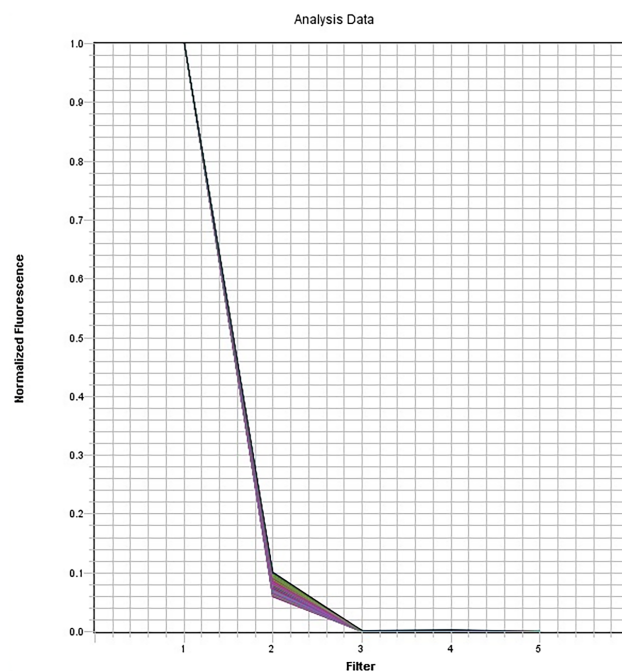
EXAMPLE DATA ANALYSIS AND FIGURES


Figure 1. ABI 7500 FAST system Cy5 dye spectrum.

DISCLAIMER

AAT Bioquest provides high-quality reagents and materials for research use only. For proper handling of potentially hazardous chemicals, please consult the Safety Data Sheet (SDS) provided for the product. Chemical analysis and/or reverse engineering of any kit or its components is strictly prohibited without written permission from AAT Bioquest. Please call 408-733-1055 or email info@aatbio.com if you have any questions.