

AzuraView™ Probe Fast qPCR Mix

Catalog No.	Pack Size and Concentration	Components and Volume
AZ-2601B	100 x 20 µl reactions, 2x	AzuraView™ Probe Fast qPCR Mix Blue - 1 x 1 mL
AZ-2605B	500 x 20 µl reactions, 2x	AzuraView™ Probe Fast qPCR Mix Blue - 5 x 1 mL
AZ-2620B	2000 x 20 µl reactions, 2x	AzuraView™ Probe Fast qPCR Mix Blue - 20 x 1 mL
AZ-2650B	5000 x 20 µl reactions, 2x	AzuraView™ Probe Fast qPCR Mix Blue - 10 x 5 mL
AZ-2601C	100 x 20 µl reactions, 2x	AzuraView™ Probe Fast qPCR Mix Colorless - 1 x 1 mL
AZ-2605C	500 x 20 µl reactions, 2x	AzuraView™ Probe Fast qPCR Mix Colorless - 5 x 1 mL
AZ-2620C	2000 x 20 µl reactions, 2x	AzuraView™ Probe Fast qPCR Mix Colorless - 20 x 1 mL
AZ-2650C	5000 x 20 µl reactions, 2x	AzuraView™ Probe Fast qPCR Mix Colorless - 10 x 5 mL

Description

AzuraView™ Probe Fast qPCR Mix is an inhibitor-tolerant 2x master mix for use in real-time quantitative PCR assays and has been formulated for probe-detection technology, including TaqMan® and molecular beacon probes. The 2x master mix includes a blue tracer dye providing an easy-to-see, easy-to-pipette format. AzuraView™ Probe Fast qPCR Mix reliably quantifies any DNA template including cDNA, genomic DNA, and low copy number viral DNA sequences. The blue dye does not interfere with DNA synthesis but will impact the intensity of some fluorescent probes such as Cy5 and Texas Red. For complex multiplex reactions that include these fluorophores, AzuraView™ Probe Fast qPCR Mix is also available in a colorless version.

- Compatible with all modern standard and fast cycling instruments and a wide range of cycling conditions
- Contains inert blue tracer dye to simplify the set-up of PCR plates and strip tubes
- Increased resistance to ambient temperatures and up to 40 freeze-thaw cycles

Storage

AzuraView™ Probe Fast qPCR Mix is shipped on blue ice and should be stored at –20°C upon receipt. Excessive freeze/thawing should be avoided.

Important Guidelines

- Use primer-design software, such as Primer3 (<http://frodo.wi.mit.edu/primer3/>) or visual OMP™ (<http://dnasoftware.com/>). Primers should have a melting temperature (T_m) of approximately 60°C.
- Ideally, the optimal amplicon length should be 80 bp - 200 bp and should not exceed 400 bp.
- AzuraView™ Probe Fast qPCR Mix includes Low ROX. Generally, modern instruments do not require a passive reference dye but include the option to use it for normalization.
- When comparing AzuraView™ Probe Fast qPCR Mix with a reagent from an alternative supplier, we strongly recommend amplifying from a 10-fold template dilution series. Loss of detection at low template concentration is the only direct measurement of sensitivity. An early Ct value is not an indication of good sensitivity, but rather an indication of reaction speed.

Reaction setup

1. Prepare a qPCR master mix based on following table (and briefly vortex AzuraView™ Probe Fast qPCR Mix before use):

Component	20 µl Reaction	Final Concentration/Notes
2x AzuraView™ Probe Fast qPCR Mix	10 µl	1x
Forward Primer (10 µM)	0.8 µl	400 nM
Reverse Primer (10µ M)	0.8 µl	400 nM
Probe (10µM)	0.4 µl	200 nM
Template DNA	<100 ng cDNA, <1 µg genomic DNA	variable
PCR-grade water	Up to 20 µl final volume	

* For alternative total reaction volumes (eg. 25 µl), scale all components proportionally to maintain final concentrations.

2. Program the qPCR instrument using following conditions, acquiring data on the appropriate channel:

Cycles	Temperature & Time	Notes
1	95°C, 2 minutes	Enzyme activation; use 3 minutes for genomic DNA
30 - 40	95°C, 5 seconds 60°C to 65°C, 20 - 30 seconds	Denaturation Anneal/Extension (do not exceed 40 seconds and do not use temps below 60°C for optimal results)

Quality Control

AzuraView™ Probe Fast qPCR Mix is tested extensively for robust activity, processivity, efficiency, heat activation, sensitivity, absence of nuclease contamination and absence of nucleic acid contamination. AzuraView™ Probe Fast qPCR Mix is manufactured under a comprehensive quality management system, following ISO 9001:2015 standards.

Limitations of Use

This product is intended for research purposes only and is not intended for any animal or human therapeutic use.

Technical Support

For Trouble-shooting and Technical Guidance, please contact us at tech@azuragenomics.com and provide qPCR reaction conditions, cycling parameters, amplicon size, and screen grabs (amplification traces and melting profiles) if possible.

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