

# Investigator<sup>®</sup> Quantiplex<sup>®</sup> Pro Calibration Kit Using the Applied Biosystems<sup>®</sup> 7500 Real-Time PCR System

Kit reagents should be stored immediately upon receipt at  $-30$  to  $-15^{\circ}\text{C}$  in a constant-temperature freezer, and protected from light. Under these conditions, the components are stable until the expiration date indicated on the kit.

## Further information

- *Investigator Quantiplex Pro Kit Handbook*: [www.qiagen.com/HB-2335](http://www.qiagen.com/HB-2335)
- Safety Data Sheets: [www.qiagen.com/safety](http://www.qiagen.com/safety)
- Technical assistance: [support.qiagen.com](http://support.qiagen.com)

## Notes before starting

- Set up calibration plate in an area separate from that used for DNA isolation and PCR product analysis (post-PCR).
- Use Applied Biosystems 7500 Real-Time PCR System-related consumables (optical 96-well reaction plates and optical adhesive films).
- Use disposable tips containing hydrophobic filters to minimize cross-contamination.
- Repeat dispenser-pipettes can be used to dispense 20  $\mu\text{l}$  into all 96 wells of a plate assigned for one dye.
- For repeat dispensers use disposable, sterile, separately wrapped repeat dispenser tips.

- Always wear a suitable lab coat, disposable gloves and protective goggles. Take care to minimize touching the plate wells, optical adhesive films and bottoms of the plates.

### Calibration using the Investigator Quantiplex Pro Calibration Kit

1. Thaw kit components, if required. Mix all kit components before use.
2. Vortex for at least 5s each calibration standard before removing an aliquot.
3. Dilute each Investigator Quantiplex Pro Calibration Kit standard in a separate tube, as described in Table 1.

**Table 1. Dilution scheme for Investigator Quantiplex Pro Calibration Kit standards**

Component	Volume in $\mu$ l				
Calibration Standard FAM	23	-	-	-	-
Calibration Standard JOE	-	23	-	-	-
Calibration Standard ATTO 550	-	-	23	-	-
Calibration Standard ROX	-	-	-	23	-
Calibration Standard ATTO 647N	-	-	-	-	23
Quantiplex Pro Calibration Buffer	2277	2277	2277	2277	2277
Total volume	2300	2300	2300	2300	2300

4. Mix each calibration standard by vortexing for at least 5s.
5. Assign and label one separate optical 96-well reaction plate for each Investigator Quantiplex Pro Calibration Kit standard (5 in total).
6. Dispense 20  $\mu$ l of diluted Investigator Quantiplex Pro Calibration Kit standard FAM into the assigned dye-specific optical 96-well reaction plate.
7. Close the plate with an optical adhesive film.
8. Repeat these steps for each of the other remaining Investigator Quantiplex Pro Calibration Kit standards (JOE, ATTO 550, ROX and ATTO 647N).
9. Centrifuge plates briefly. Always protect plates from light.
10. Start cycler calibration.
11. After calibration, store the calibration plates at  $-30$  to  $-15^{\circ}\text{C}$  in a constant-temperature freezer, protected from light.

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**Note:** Detailed protocols and instructions for cyclor calibration are available in the *Investigator Quantiplex Pro Kit Handbook*.



Scan QR code for handbook.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual.

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