



**PCRBIO SYSTEMS**  
simplifying research

## SampleTrack Buffer

[www.pcrbio.com](http://www.pcrbio.com)

### Product description:

SampleTrack Buffer is a 100x aqueous solution of a yellow dye, suitable for sample visualisation during PCR and qPCR reaction setup.

The yellow dye has an absorbance maximum at ~410 nm, and is inert, meaning it does not inhibit PCR reactions and does not quench fluorescence of SYBR-type dyes or common qPCR probes at the recommended concentration.

SampleTrack Buffer can be used to monitor sample addition to any qPCR or PCR mix from PCR Biosystems, including Red endpoint mixes and cDNA synthesis kits. It is particularly recommended in combination with Blue (PB20.15-PB20.17 and PB20.25-PB20.27) and Purple (PB20.65-PB20.68 and PB25.85-PB24.88) qPCR products.

### Quality control

PCR Biosystems operates under an ISO 13485 certified Quality Management System. Our products are extensively tested and undergo a comprehensive, multi-step quality control process according to ISO 13485 standards, to ensure optimum performance, consistency and traceability.

| Pack size | 100x SampleTrack Buffer |
|-----------|-------------------------|
| 1 mL      | 2 x 0.5 mL              |

### Shipping and storage

On arrival the dye should be stored between -30 °C and -20 °C. Avoid prolonged exposure to light. If stored correctly, the kit will retain full activity until the indicated expiry date. Single tubes can be stored at 4 °C for 1 month during frequent use.

### Technical support

Scan or click the QR code for troubleshooting help and answers to frequently asked technical questions. For further technical support, please email [technical@pcrbio.com](mailto:technical@pcrbio.com) with the following information:

- Amplicon size
- Reaction setup
- Cycling conditions
- Screen grabs of amplification traces and melting profile



TROUBLESHOOT



FAQS

**Product Use:** Unless we agree otherwise in writing, the Goods we supply are provided:

1. For research purposes only and you should not use or rely on the Goods for diagnostic purposes. If you wish to use the Goods in a regulatory approved medical device, please contact us so that we may consider this and discuss it further with you.
2. Subject to our standard terms and conditions found at <https://pcrbio.com/terms-conditions/>.

## Important considerations

**Maximum amount:** Although SampleTrack Buffer is inert, we do not recommend using it above a final concentration of 1x, equivalent to 0.2 µL per 20 µL reaction, to prevent excessive fluorescence quenching. The exception is its use with Red endpoint mixes, as described under “Best practice”.

**Best practice:** Add SampleTrack Buffer to each template sample before dispensing the prepared template into the PCR reactions. For example, when preparing 20 µL reactions containing 5 µL of sample (i.e., one-quarter of the final volume), SampleTrack Buffer should be at 4x in the prepared sample to achieve 1x in the final reaction.

Do not add SampleTrack Buffer to the reaction master mix or as an individual component separate to template addition, as this will not allow you to track whether template has been added.

SampleTrack Buffer should be added at a final 1x reaction concentration when used with all qPCR and clear endpoint PCR mixes, and at a 5x final reaction concentration for use with Red endpoint mixes.

**Compatibility:** SampleTrack Buffer can be used with all PCR Biosystems qPCR and PCR products at the recommended concentration. It may also be used with mixes from other suppliers but should be tested on a case-by-case basis. The buffer is compatible with DNA, cDNA and RNA samples.

**Expected result:** When samples containing SampleTrack Buffer are added to PCR Biosystems Blue mixes, the reaction colour changes from blue to green. Purple mixes change from purple to orange, clear mixes turn yellow, and Red endpoint mixes turn bright orange.

## How to use SampleTrack Buffer:

1. Prepare each sample by adding SampleTrack Buffer at a concentration that will produce 1x in the final PCR reaction, or 5x when using a Red endpoint mix. Refer to Tables 1 and 2 for the appropriate preparation volumes. SampleTrack Buffer may be added to the entire sample stock or to an aliquot, depending on experimental requirements. The prepared samples will acquire an intense yellow colour.
2. Assemble the PCR or qPCR reaction as per the corresponding product manual. Add the sample(s) prepared in the previous step, following the guidelines under “Important considerations”. Conduct thermocycling as described for the specific product. No modification to cycling conditions is required when using SampleTrack Buffer.

Table 1:Preparing samples with SampleTrack for final 1x concentration in 20 µL reactions.Use with Blue, Purple and clear mixes.

| Template added per 20 µL reaction | SampleTrack concentration in prepared template | Template required for 10 reactions | Preparation                                   |
|-----------------------------------|------------------------------------------------|------------------------------------|-----------------------------------------------|
| 1 µL                              | 20x                                            | 10 µL                              | 2 µL 100x SampleTrack Buffer + 8 µL template  |
| 2 µL                              | 10x                                            | 20 µL                              | 2 µL 100x SampleTrack Buffer + 18 µL template |
| 3 µL                              | 6.7x                                           | 30 µL                              | 2 µL 100x SampleTrack Buffer + 28 µL template |
| 5 µL                              | 4x                                             | 50 µL                              | 2 µL 100x SampleTrack Buffer + 48 µL template |

Table 2: Preparing samples with SampleTrack Buffer for final 5x concentration in 20 µL reactions. Use with Red mixes.

| Template added per 20 µL reaction | SampleTrack concentration in prepared template                                                                 | Template required for 10 reactions | Preparation                                    |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------|
| 1 µL                              | 1 µL of buffer needs to be added for 5x concentration, leaving insufficient volume for template+sample in 1 µL |                                    |                                                |
| 2 µL                              | 50x                                                                                                            | 10 µL                              | 10 µL 100x SampleTrack Buffer + 10 µL template |
| 3 µL                              | 33.3x                                                                                                          | 10 µL                              | 10 µL 100x SampleTrack Buffer + 20 µL template |
| 5 µL                              | 20x                                                                                                            | 10 µL                              | 10 µL 100x SampleTrack Buffer + 40 µL template |