

Guidelines for the Blood Transfusion Services

14.3: Working practices

<http://transfusionguidelines.org/red-book/chapter-14-guidelines-for-the-use-of-dna-pcr-techniques-in-blood-establishments/14-3-working-practices>

14.3: Working practices

- DNA should be as intact as possible.
- An archival record (e.g. photograph or electronic image) of each post-PCR run should be retained.
- The performance of non-commercial kit based probes and primers must be fully validated and characterised before they are put into use.
- Reagents (e.g. chemicals, enzymes) must be stored and utilised under conditions recommended by the manufacturer, including, for example, storage temperature, test temperature, shelf life, diluent buffer and concentration for use.
- Each lot of reagents must be tested before use in routine typing.
- For reagents and kits, the source, lot number, expiration date and storage conditions should be documented.
- Users should have procedures to ensure that periodic checks of probes and primers are carried out to detect their deteriorating performance or contamination.
- Thermal cyclers should be serviced at least annually according to the manufacturer's recommendations and a temperature calibration should be performed. A record of the service and calibration checks should be maintained.
- When using non-commercial kit testing methods laboratories should regularly check their primer sequences for newly discovered single nucleotide polymorphisms. This can be done via the website for the National Genetics References Laboratories (ngri.org.uk).
- Software used for analysis of results must be validated before use and updated regularly with appropriate allele sequences.