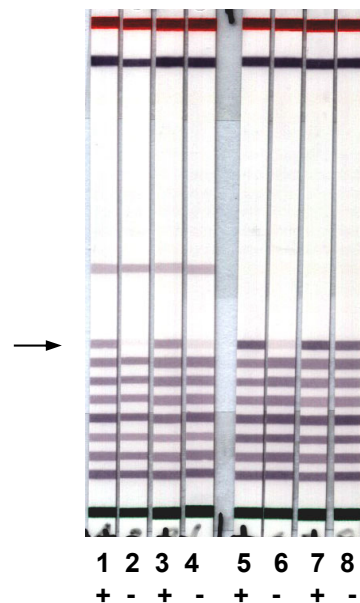


Potential effect of pre-heating DNA samples on FMF E148Q signals

DNA samples obtained by methods other than the reagents and protocol provided in the ViennaLab FMF StripAssay® [REF 4-230] and FMF-SAA1 StripAssay® [REF 4-390] may in some cases show weak or missing signals for wild-type and mutant E148Q. The effect is due to impairment of PCR efficiency for this particular fragment, and has been observed with several popular DNA extraction kits (e.g. Qiagen, Genra, Invitex).

In an attempt to search for immediate improvement, it was observed that pre-heating such DNA samples to 98°C for 10 min, immediately followed by cooling down on ice or in a cold block before setting up the PCR, can completely restore normal PCR yields.



The above picture shows four DNA samples A-D amplified either untreated (-) or after pre-heating to 98°C for 10 min (+): sample D (teststrips 7/8) showed normal patterns under both conditions, while samples A (teststrips 1/2), B (teststrips 3/4) and C (teststrips 5/6) showed valid staining for E148Q (marked by →) only after pre-treatment.

Since the ViennaLab GenXtract™ protocol already includes 98°C pre-heating, there is no need to perform an extra step when using the kit extraction system.