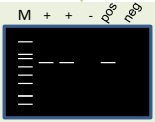
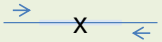
Isolate DNA

Detection of respective gene by PCR amplification of homopolymeric tract and closely flanking regions using proximal, intragenically directed primers[a].



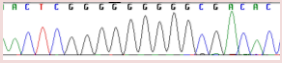
Detection of PCR products by agarose gel electrophoresis.

(a)



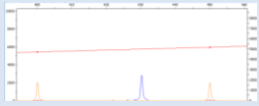
(b)

Confirm absence of genes by (a) PCR amplification of corresponding locus using externally directed primers[d] (*hpuA*) or intragenically targetted primers against *exl3*[e] (*hmbR*) and (b) detection of products by agarose gel electrophoresis.



Sequence analysis of PCR products (using proximal PCR primers[a)] to characterise homopolymeric tract and flanking regions. The illustrated tract possessed nine G repeats.

PCR amplification of homopolymeric tract and flanking regions using genomic DNA or 'Round 1' PCR products as template in conjunction with proximal FAM-labelled primers[a].

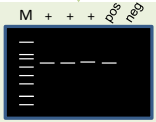


Fragment analysis of FAM-labelled PCR products (blue peak) against a GeneScan 500 LIZ size standard (orange peaks) to enable quantitation of homopolymeric tract length.

Specimen DNA

'Round 1' PCR amplification of homopolymeric tract and flanking regions using remote, intragenically directed primers[b].

'Round 2' (nested) PCR amplification of homopolymeric tract and closely flanking regions using 'round 1' PCR product as a template in conjunction with intermediate, intragenically directed primers[c].



Agarose gel electrophoresis gel to confirm the presence of 'round 2' PCR products.

Key:

Thin blue line = DNA flanking the respective gene.
Think blue line = *hmbR* or *hpuA*.
Yellow block = homopolymeric tract.
Arrows = primers.