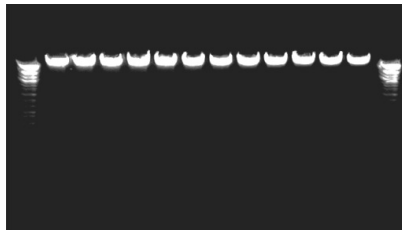


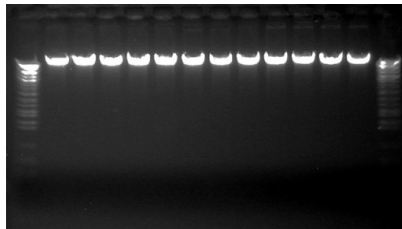


## Long-Term Stability of Purified DNA

Automated nucleic acid isolation has been performed using the **chemagic DNA Blood Kit special** on the **chemagic Magnetic Separation Module I (chemagic MSM I)**. DNA eluates obtained from 12 blood samples (7 ml each) in the same isolation run were stored in 10 mM Tris buffer (pH 8) at 4 °C for 3 years. 500 ng of each DNA eluate – directly after the isolation and once a year after storage - were subsequently analyzed by agarose gel electrophoresis. The gel pictures of the DNA analyzed directly after isolation as well as after 3 years of storage and additionally 2 weeks at 37 °C are shown below.



DNA analyzed directly after isolation  
(500 ng per lane)



DNA analyzed after 3 years of storage at  
4 °C and additionally 2 weeks at 37 °C  
(500 ng per lane)

The results clearly demonstrate the high quality of DNA isolated using the chemagic kit chemistry in combination with the **chemagic MSM I**. DNA isolated with chemagen's automated platform is stable even after long-term storage. No degradation could be detected in eluates stored for 3 years at 4 °C even after additionally incubating at 37 °C for 2 weeks. This indicates that the DNA's will be stable for a much longer period of time than tested so far.

*Further Questions?*

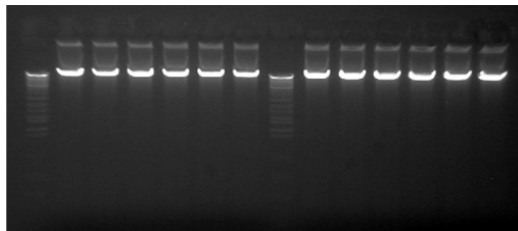
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In contrast to some competitor beads chemagen's M-PVA Magnetic Beads do not catalyze DNA degradation. DNA solutions mixed with considerable amounts of Magnetic Beads and incubated at 37 °C for 2 weeks did not show any degradation when analyzed by agarose gel electrophoresis.



DNA analyzed after isolation (six bands, left) and stored 2 weeks at 37 °C after adding Magnetic Beads (six bands, right)

This stability data is easily understood and explained by the remarkable properties of the M-PVA Magnetic Beads. On one hand the hydrophilic nature of the beads prevents binding of proteins. On the other hand the tight binding affinity to nucleic acids allows vigorous washing of the beads without fear of shearing the product. Additionally, the high thermal stability allows the autoclaving of the beads to prevent bacterial contamination if so required. The chemagic MSM I in combination with the chemagic Kits for nucleic acid isolation are utilised in clinical, research and production facilities throughout the world where stability of the DNA is of paramount importance.

*Further Questions?*

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