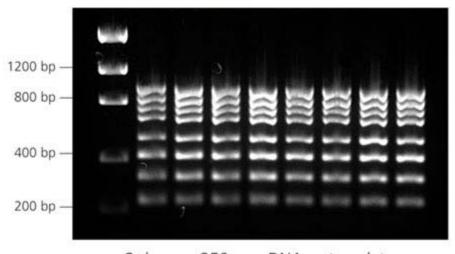


## **Applications**

#### **Optimize Results**

Reliable, reproducible results are especially important for clinical research applications such as marker validation, drug development, and epidemiological studies. The ability to store blood samples for weeks or months allows for batch processing, minimizing inter-assay variation. The high purity of the final DNA ensures reliable results in downstream applications.

# Multiplex amplification of single copy genes



8 donors, 250 ng gDNA as template

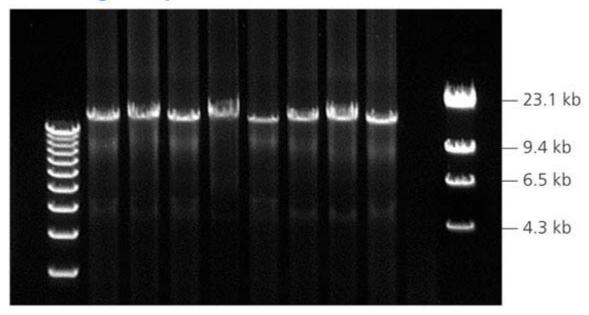
955 bp CD19 845 bp CD59 756 bp CD40 662 bp CD14 523 bp AGTR 414 bp cKit 310 bp B29 E4 222 bp PRP



### **Enhanced PCR Assays**

DNA purified using the PAXgene Blood DNA System performs well in a wide range of enzymatic assays including, but not limited to, PCR. The high purity and high molecular weight of the DNA improve results in challenging procedures such as multiplex and long-range PCR.

### Amplification of ultralong PCR products



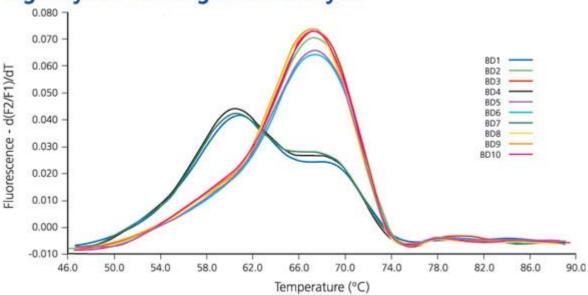
15 kb human coagulation factor IX gene fragment 8 donors, 250 ng gDNA as template



#### Reliable SNP genotyping

Single Nucleotide polymorphisms (SNPs) are found approximately every 500-1000 base pairs in the human genome. They are valuable predictive markers in genetic mapping studies and drug development. DNA purified using the PAXgene Blood DNA System is well suited for SNP analysis. It is compatible with commonly used fluorescence-based technologies, such as TaqMan and LightCycler technology, as well as mass spectrometry-based systems. The DNA can also be used in mitochondrial genome analysis.

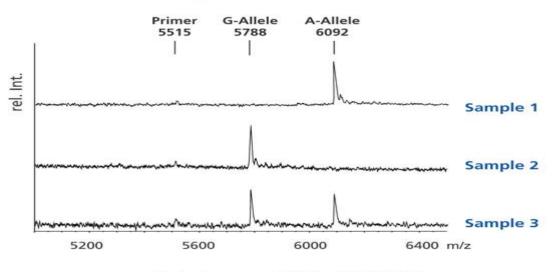
### LightCycler melting curve analysis



NF-α/G-308A Data kindly provided by H. Fernandes, UMDNJ, NJ, USA



### Masscode<sup>™</sup> analysis

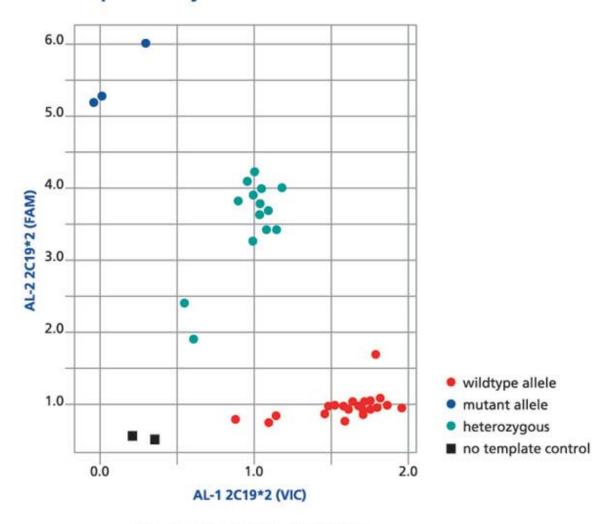


Cytochrome P450, CYP2C19

Data kindly provided by A. Huminy and C.M. Becker, Institute for Biochemistry, University of Erlangen, Germany.



### TaqMan analysis



Cytochrome P450, CYP2C19

Data kindly provided by A. Pahl, Institute for Pharmacology, University of Erlangen, Germany.