

## Abstract

Three novel human leukocyte antigen (HLA) alleles were identified using a sequence-based typing of HLA class I and class II alleles of 1867 participants from a male circumcision cohort in Kenya. The new alleles were first identified by sequencing and then confirmed by cloning the polymerase chain reaction (PCR) products and sequencing multiple clones. HLA-B\*58:43 was identical to HLA-B\*58:02 with the exception of a nucleotide change at codon 125 in exon 3 (GCC→ACC), and resulted in the amino acid change from Alanine to Threonine. HLA-C\*03:190 was identical to HLA-C\*03:02:01 with the exception of a nucleotide change at codon 131 in exon 3 (CGC→TGC), and resulted in the amino acid change from Arginine to Cysteine. HLA-DPA1\*01:12 was identical to HLA-DPA1\*01:03:01:01 with the exception of a nucleotide change at codon 66 in exon 2 (TTG→TCG), and resulted in the amino acid change from Leucine to Serine.