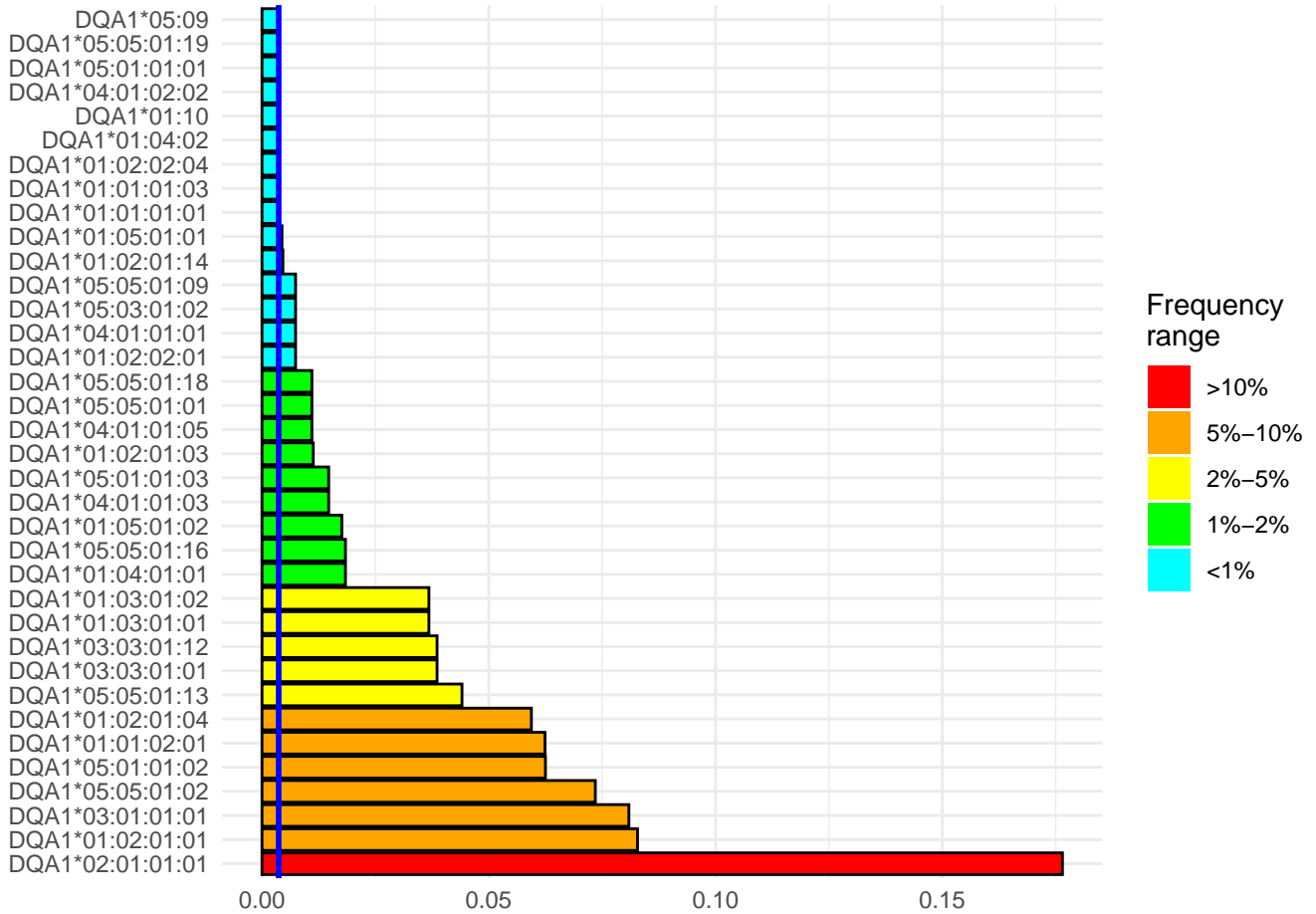


Summary results for HLA-DQA1 in TUN



Sample size: 136

Estimated heterozygosity: 0.9288

Hardy-Weinberg equilibrium test p-value: 0.470176

Ewens-Watterson-Slatkin neutrality test: FDR p.adj min: 0.200 max: 0.767

There are 3 low frequency alleles or haplotypes not shown above.

Follows the complete list of alleles, including those with lower and null frequencies not shown before.

| | Allele or Haplotype Name | Frequency Estimate |
|----|---------------------------------|---------------------------|
| 1 | DQA1*02:01:03 | 0.0000 |
| 2 | DQA1*02:13 | 0.0000 |
| 3 | DQA1*01:02:01:02 | 0.0000 |
| 4 | DQA1*01:02:01:05 | 0.0000 |
| 5 | DQA1*01:02:01:08 | 0.0000 |
| 6 | DQA1*01:02:01:15 | 0.0000 |
| 7 | DQA1*01:02:03 | 0.0000 |
| 8 | DQA1*01:02:06 | 0.0000 |
| 9 | DQA1*01:02:08 | 0.0000 |
| 10 | DQA1*01:02:09 | 0.0000 |
| 11 | DQA1*01:02:10 | 0.0000 |
| 12 | DQA1*01:21 | 0.0000 |
| 13 | DQA1*01:23 | 0.0000 |
| 14 | DQA1*01:31 | 0.0000 |
| 15 | DQA1*01:41 | 0.0000 |
| 16 | DQA1*01:48 | 0.0000 |
| 17 | DQA1*01:02:01:11 | 0.0000 |
| 18 | DQA1*01:02:01:10 | 0.0000 |
| 19 | DQA1*04:01:03 | 0.0000 |
| 20 | DQA1*01:01:02:02 | 0.0001 |
| 21 | DQA1*05:09 | 0.0037 |
| 22 | DQA1*04:01:02:02 | 0.0037 |
| 23 | DQA1*01:01:01:03 | 0.0037 |
| 24 | DQA1*05:01:01:01 | 0.0037 |
| 25 | DQA1*01:02:02:04 | 0.0037 |
| 26 | DQA1*01:01:01:01 | 0.0037 |
| 27 | DQA1*01:10 | 0.0037 |
| 28 | DQA1*01:04:02 | 0.0037 |
| 29 | DQA1*05:05:01:19 | 0.0037 |
| 30 | DQA1*05:05:01:20 | 0.0037 |
| 31 | DQA1*04:01:02:01 | 0.0037 |
| 32 | DQA1*01:05:01:01 | 0.0044 |
| 33 | DQA1*01:02:01:14 | 0.0046 |
| 34 | DQA1*05:03:01:02 | 0.0074 |
| 35 | DQA1*04:01:01:01 | 0.0074 |
| 36 | DQA1*01:02:02:01 | 0.0074 |

| | Allele or Haplotype Name | Frequency Estimate |
|----|---------------------------------|---------------------------|
| 37 | DQA1*05:05:01:09 | 0.0074 |
| 38 | DQA1*05:05:01:01 | 0.0110 |
| 39 | DQA1*04:01:01:05 | 0.0110 |
| 40 | DQA1*05:05:01:18 | 0.0110 |
| 41 | DQA1*01:02:01:03 | 0.0113 |
| 42 | DQA1*04:01:01:03 | 0.0147 |
| 43 | DQA1*05:01:01:03 | 0.0147 |
| 44 | DQA1*01:05:01:02 | 0.0176 |
| 45 | DQA1*01:04:01:01 | 0.0184 |
| 46 | DQA1*05:05:01:16 | 0.0184 |
| 47 | DQA1*01:03:01:01 | 0.0368 |
| 48 | DQA1*01:03:01:02 | 0.0368 |
| 49 | DQA1*03:03:01:01 | 0.0386 |
| 50 | DQA1*03:03:01:12 | 0.0386 |
| 51 | DQA1*05:05:01:13 | 0.0441 |
| 52 | DQA1*01:02:01:04 | 0.0594 |
| 53 | DQA1*01:01:02:01 | 0.0624 |
| 54 | DQA1*05:01:01:02 | 0.0625 |
| 55 | DQA1*05:05:01:02 | 0.0735 |
| 56 | DQA1*03:01:01:01 | 0.0809 |
| 57 | DQA1*01:02:01:01 | 0.0828 |
| 58 | DQA1*02:01:01:01 | 0.1765 |