**Supplemental Table S5: *HLA-DPA1* Allele Cumulative Frequency.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***DPA1*** | **UK** | **Sweden** | **France** | **Gambia** | **Nigeria** | **China** | **Japan** | **India** | **Mexico** |
| *\*01:03* | 78.100% | 86.500% | 81.800% | 21.200% | 23.500% | 43.800% | 40.300% | 59.300% | 86.000% |
| *\*02:01* | 17.400% | 7.000% | 13.700% | 56.800% | 33.500% | 10.000% | 16.020% | 21.200% | 12.000% |
| *\*02:02/02:06* | 4.300% | 6.000% | 3.600% | 13.300% | 31.600% | 43.700% | 43.520% | 16.100% | 0.000% |
| *\*03:01* | 0.000% | 0.500% | 0.000% | 8.200% | 11.500% | 1.200% | 0.000% | 0.000% | 0.000% |
| Total | 99.800% | 100.000% | 99.100% | 99.500% | 100.100% | 98.700% | 99.840% | 96.600% | 98.000% |

UK: United Kingdom (n=187); Sweden: Sweden pop 2 (n=200); France: France Ceph (n=124); Gambia: Gambia (n=146)

Nigeria: Nigeria Southwest Abania Yoruba (n=130). Note: due to rounding errors population total is > 100%; China: China Shanghai pop 2 (n=40);

Japan: Japan pop 17 (n=3078); India: India Bombay (n=59); and Mexico: Mexico Senora Seri (n=34).

Frequencies were obtained from http://www.allelefrequencies.net/; last accessed November 10, 2017.