**Table S16. Pairwise semantic similarity values calculated on the set of significantly enriched Molecular Functions GO terms between tissues (*nS*L in Africans)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Tissue1** | **Tissue2** | **Empirical SS values** | **Permutation SS values** |
| adipose-tissue | blood-vessel | 0.848 | 0.27 |
| adipose-tissue | blood | 0.91 | 0.248 |
| adipose-tissue | brain | 0.932 | 0.253 |
| adipose-tissue | large-intestine | 0.932 | 0.255 |
| adipose-tissue | lung | 1 | 0.254 |
| adipose-tissue | meninx | 0.779 | 0.261 |
| adipose-tissue | spleen | 0.932 | 0.253 |
| adipose-tissue | thymus | 0.878 | 0.248 |
| adipose-tissue | tonsil | 0.932 | 0.255 |
| adipose-tissue | urinary-bladder | 0.932 | 0.257 |
| blood-vessel | blood | 0.884 | 0.254 |
| blood-vessel | brain | 0.904 | 0.255 |
| blood-vessel | large-intestine | 0.904 | 0.259 |
| blood-vessel | lung | 0.848 | 0.259 |
| blood-vessel | meninx | 0.948 | 0.254 |
| blood-vessel | spleen | 0.904 | 0.249 |
| blood-vessel | thymus | 0.959 | 0.248 |
| blood-vessel | tonsil | 0.904 | 0.254 |
| blood-vessel | urinary-bladder | 0.904 | 0.261 |
| blood | brain | 0.971 | 0.248 |
| blood | large-intestine | 0.971 | 0.25 |
| blood | lung | 0.91 | 0.249 |
| blood | meninx | 0.815 | 0.256 |
| blood | spleen | 0.971 | 0.249 |
| blood | thymus | 0.916 | 0.259 |
| blood | tonsil | 0.971 | 0.253 |
| blood | urinary-bladder | 0.971 | 0.25 |
| brain | large-intestine | 1 | 0.246 |
| brain | lung | 0.932 | 0.251 |
| brain | meninx | 0.83 | 0.25 |
| brain | spleen | 1 | 0.251 |
| brain | thymus | 0.94 | 0.246 |
| brain | tonsil | 1 | 0.253 |
| brain | urinary-bladder | 1 | 0.259 |
| large-intestine | lung | 0.932 | 0.251 |
| large-intestine | meninx | 0.83 | 0.262 |
| large-intestine | spleen | 1 | 0.251 |
| large-intestine | thymus | 0.94 | 0.249 |
| large-intestine | tonsil | 1 | 0.252 |
| large-intestine | urinary-bladder | 1 | 0.266 |
| lung | meninx | 0.779 | 0.251 |
| lung | spleen | 0.932 | 0.248 |
| lung | thymus | 0.878 | 0.254 |
| lung | tonsil | 0.932 | 0.253 |
| lung | urinary-bladder | 0.932 | 0.258 |
| meninx | spleen | 0.83 | 0.259 |
| meninx | thymus | 0.885 | 0.252 |
| meninx | tonsil | 0.83 | 0.252 |
| meninx | urinary-bladder | 0.83 | 0.259 |
| spleen | thymus | 0.94 | 0.251 |
| spleen | tonsil | 1 | 0.249 |
| spleen | urinary-bladder | 1 | 0.251 |
| thymus | tonsil | 0.94 | 0.246 |
| thymus | urinary-bladder | 0.94 | 0.261 |
| tonsil | urinary-bladder | 1 | 0.267 |

All values have been rounded to the 3rd decimal place. “Permutation SS values” refer to the 95th

percentile values of the distribution of 1,000 semantic similarity scores calculated on the randomly sampled GO terms for each pair of tissues.