**Supporting information**

**S2 Table.**  HLA-B allele frequencies among the 169,995 CMDP registry donors

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Allele | Freq (%) | Allele | Freq (%) | Allele | Freq (%) | Allele | Freq (%) | Allele | Freq (%) |
| B\*07:02 | 2.1842 | B\*15:25 | 0.6244 | B\*35:29 | 0.0003 | B\*40:69 | 0.0006 | B\*51:36 | 0.0129 |
| B\*07:05 | 0.7321 | B\*15:27 | 0.8094 | B\*35:30 | 0.0015 | B\*40:70 | 0.0003 | B\*51:39 | 0.0018 |
| B\*07:06 | 0.0577 | B\*15:29 | 0.0094 | B\*35:42 | 0.0021 | B\*40:72 | 0.0003 | B\*51:51 | 0.0003 |
| B\*07:10 | 0.0044 | B\*15:30 | 0.0006 | B\*35:54 | 0.0003 | B\*40:75 | 0.0006 | B\*51:78 | 0.0003 |
| B\*07:31 | 0.0003 | B\*15:32 | 0.2241 | B\*35:64 | 0.0003 | B\*40:78 | 0.0132 | B\*52:01 | 2.8542 |
| B\*07:48 | 0.0009 | B\*15:34 | 0.0003 | B\*35:85 | 0.0003 | B\*40:81 | 0.0006 | B\*52:04 | 0.0003 |
| B\*07:81 | 0.0003 | B\*15:35 | 0.0200 | B\*37:01 | 1.3468 | B\*40:84 | 0.0024 | B\*52:06 | 0.0003 |
| B\*07:91 | 0.0003 | B\*15:38 | 0.0071 | B\*37:02 | 0.0003 | B\*40:87 | 0.0003 | B\*52:11 | 0.0009 |
| B\*08:01 | 0.8621 | B\*15:39 | 0.0006 | B\*37:04 | 0.0035 | B\*40:97 | 0.0079 | B\*53:01 | 0.0329 |
| B\*08:09 | 0.0006 | B\*15:46 | 0.0462 | B\*38:01 | 0.4888 | B\*41:01 | 0.1018 | B\*54:01 | 3.0389 |
| B\*13:01 | 5.0131 | B\*15:56 | 0.0003 | B\*38:02 | 2.6130 | B\*41:02 | 0.0200 | B\*54:16 | 0.0003 |
| B\*13:02 | 5.7690 | B\*15:58 | 0.0935 | B\*38:15 | 0.0035 | B\*42:01 | 0.0109 | B\*54:17 | 0.0071 |
| B\*13:15 | 0.0003 | B\*15:65 | 0.0009 | B\*39:01 | 1.7842 | B\*42:02 | 0.0050 | B\*55:01 | 0.0894 |
| B\*13:16 | 0.0021 | B\*15:66 | 0.0003 | B\*39:04 | 0.0003 | B\*44:02 | 0.9774 | B\*55:02 | 2.4515 |
| B\*13:28 | 0.0003 | B\*15:68 | 0.0047 | B\*39:05 | 0.1782 | B\*44:03 | 2.6295 | B\*55:04 | 0.0524 |
| B\*13:38 | 0.0006 | B\*15:70 | 0.0003 | B\*39:06 | 0.0065 | B\*44:05 | 0.0062 | B\*55:07 | 0.0277 |
| B\*13:40 | 0.0003 | B\*15:78 | 0.0009 | B\*39:09 | 0.0294 | B\*44:06 | 0.0003 | B\*55:12 | 0.0362 |
| B\*13:43 | 0.0038 | B\*15:86 | 0.0009 | B\*39:10 | 0.0003 | B\*44:27 | 0.0021 | B\*55:16 | 0.0006 |
| B\*14:01 | 0.0441 | B\*15:88 | 0.0006 | B\*39:15 | 0.0153 | B\*44:28 | 0.0003 | B\*55:21 | 0.0018 |
| B\*14:02 | 0.2591 | B\*15:93 | 0.0003 | B\*39:24 | 0.0074 | B\*44:29 | 0.0003 | B\*55:26 | 0.0003 |
| B\*15:01 | 4.9166 | B\*18:01 | 0.3991 | B\*39:31 | 0.0062 | B\*44:47 | 0.0003 | B\*55:30 | 0.0009 |
| B\*15:02 | 3.5445 | B\*18:02 | 0.0562 | B\*39:36 | 0.0012 | B\*44:87 | 0.0003 | B\*55:42 | 0.0003 |
| B\*15:03 | 0.0391 | B\*18:03 | 0.0024 | B\*39:38Q | 0.0006 | B\*45:01 | 0.1124 | B\*55:43 | 0.0003 |
| B\*15:05 | 0.1650 | B\*27:02 | 0.0194 | B\*39:58 | 0.0006 | B\*46:01 | 10.2206 | B\*55:48 | 0.0006 |
| B\*15:07 | 0.3180 | B\*27:03 | 0.0091 | B\*40:01 | 9.9559 | B\*46:08 | 0.0003 | B\*55:50 | 0.0003 |
| B\*15:08 | 0.0212 | B\*27:04 | 0.9442 | B\*40:02 | 1.9298 | B\*46:09 | 0.0006 | B\*56:01 | 0.5180 |
| B\*15:09 | 0.0018 | B\*27:05 | 0.7656 | B\*40:03 | 0.2212 | B\*46:14 | 0.0003 | B\*56:03 | 0.0474 |
| B\*15:10 | 0.0077 | B\*27:06 | 0.0550 | B\*40:06 | 3.2322 | B\*46:19 | 0.0003 | B\*56:04 | 0.0838 |
| B\*15:105 | 0.0003 | B\*27:07 | 0.1400 | B\*40:11 | 0.0021 | B\*46:27 | 0.0006 | B\*56:09 | 0.0006 |
| B\*15:11 | 1.8315 | B\*27:14 | 0.0015 | B\*40:114 | 0.0003 | B\*47:01 | 0.0206 | B\*56:10 | 0.0077 |
| B\*15:12 | 0.2665 | B\*27:15 | 0.0053 | B\*40:122 | 0.0006 | B\*48:01 | 2.4615 | B\*56:11 | 0.0003 |
| B\*15:128 | 0.0003 | B\*27:24 | 0.0212 | B\*40:125 | 0.0006 | B\*48:03 | 0.1603 | B\*56:14 | 0.0012 |
| B\*15:13 | 0.0532 | B\*27:25 | 0.0074 | B\*40:141 | 0.0009 | B\*48:04 | 0.0035 | B\*56:18 | 0.0003 |
| B\*15:134 | 0.0003 | B\*27:27 | 0.0003 | B\*40:147 | 0.0003 | B\*48:06 | 0.0009 | B\*56:21 | 0.0006 |
| B\*15:15 | 0.0003 | B\*27:36 | 0.0035 | B\*40:150 | 0.0068 | B\*48:16 | 0.0006 | B\*56:27 | 0.0006 |
| B\*15:152 | 0.0003 | B\*27:40 | 0.0003 | B\*40:151 | 0.0006 | B\*49:01 | 0.1530 | B\*57:01 | 1.0921 |
| B\*15:17 | 0.1885 | B\*27:44 | 0.0003 | B\*40:152 | 0.0003 | B\*49:11 | 0.0003 | B\*57:02 | 0.0024 |
| B\*15:178 | 0.0041 | B\*27:69 | 0.0029 | B\*40:153 | 0.0003 | B\*50:01 | 0.6200 | B\*57:03 | 0.0050 |
| B\*15:18 | 1.3453 | B\*35:01 | 2.8524 | B\*40:25 | 0.0003 | B\*51:01 | 5.6363 | B\*57:29 | 0.0018 |
| B\*15:19 | 0.0368 | B\*35:02 | 0.1971 | B\*40:33 | 0.0003 | B\*51:02 | 1.0565 | B\*58:01 | 5.8693 |
| B\*15:192 | 0.0009 | B\*35:03 | 1.1059 | B\*40:39 | 0.0003 | B\*51:05 | 0.0003 | B\*58:11 | 0.0003 |
| B\*15:198 | 0.0068 | B\*35:04 | 0.0009 | B\*40:40 | 0.0703 | B\*51:06 | 0.0097 | B\*58:12 | 0.0003 |
| B\*15:201 | 0.0003 | B\*35:05 | 0.2644 | B\*40:43 | 0.0009 | B\*51:07 | 0.0329 | B\*58:19 | 0.0003 |
| B\*15:209N | 0.0003 | B\*35:08 | 0.1394 | B\*40:48 | 0.0009 | B\*51:08 | 0.0371 | B\*59:01 | 0.0853 |
| B\*15:21 | 0.0288 | B\*35:10 | 0.0003 | B\*40:49 | 0.0006 | B\*51:09 | 0.0035 | B\*67:01 | 0.7468 |
| B\*15:212 | 0.0003 | B\*35:107 | 0.0003 | B\*40:50 | 0.0032 | B\*51:104 | 0.0003 | B\*67:03 | 0.0009 |
| B\*15:214 | 0.0003 | B\*35:11 | 0.0024 | B\*40:54 | 0.0003 | B\*51:21 | 0.0024 | B\*73:01 | 0.0109 |
| B\*15:215 | 0.0003 | B\*35:137 | 0.0003 | B\*40:55 | 0.0135 | B\*51:22 | 0.0009 | B\*81:02 | 0.1018 |
| B\*15:220 | 0.0038 | B\*35:147 | 0.0003 | B\*40:60 | 0.0003 | B\*51:34 | 0.0006 |  |  |